

FIG. 1

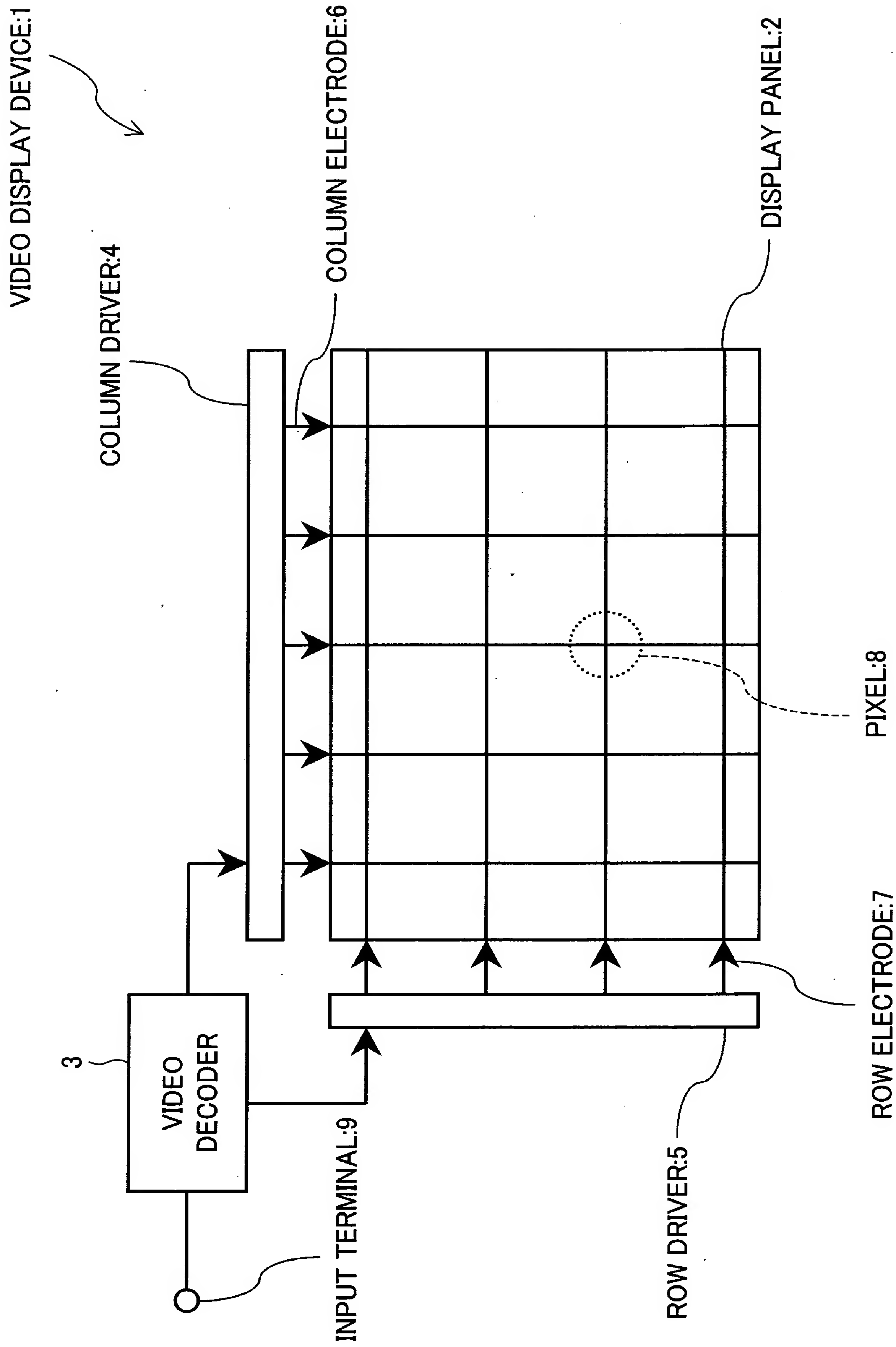


FIG. 2

INSTANTANEOUS LIGHT
EMISSION INTENSITY

FIRST LIGHT
EMISSION COMPONENT

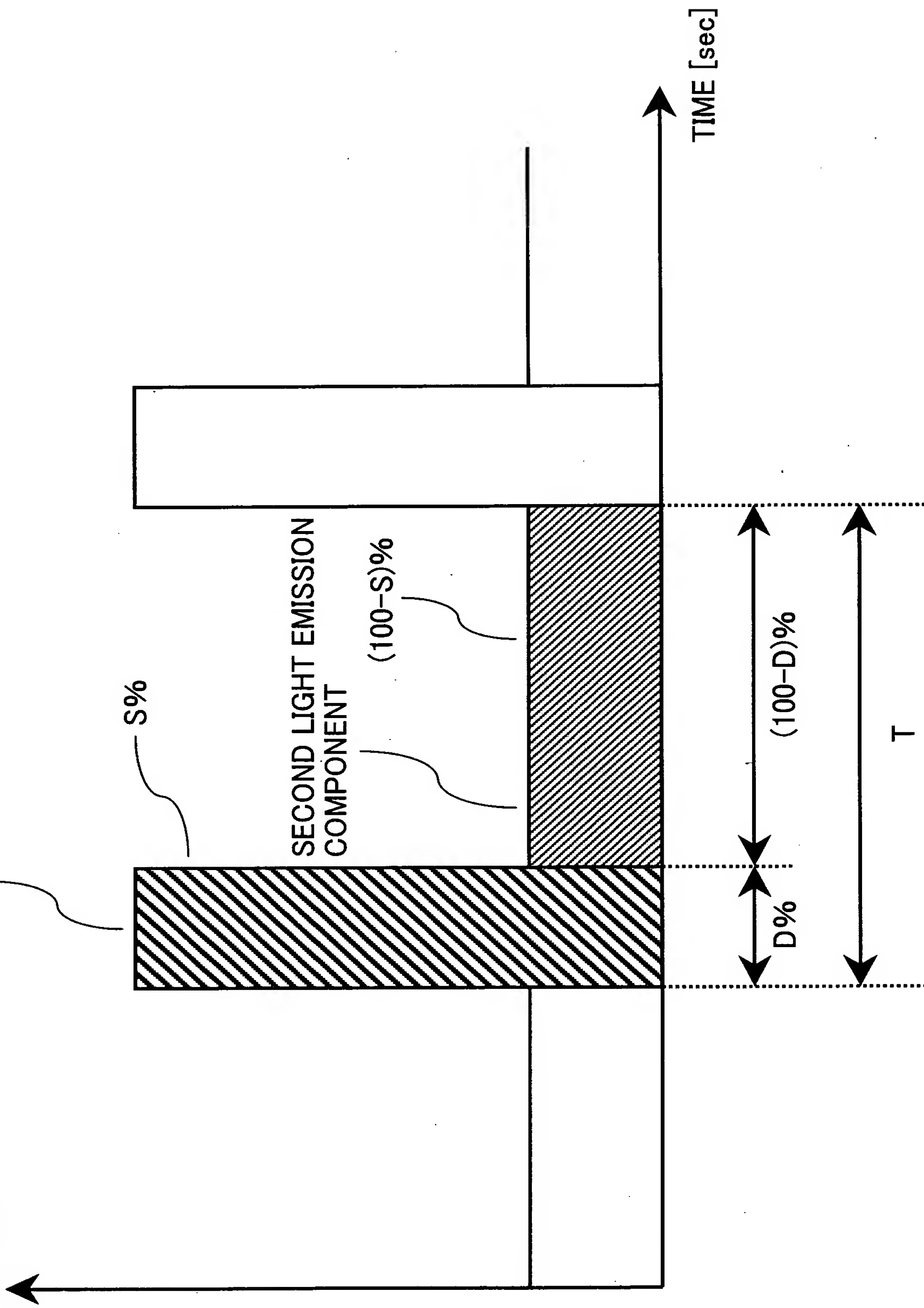


FIG. 3 (a)

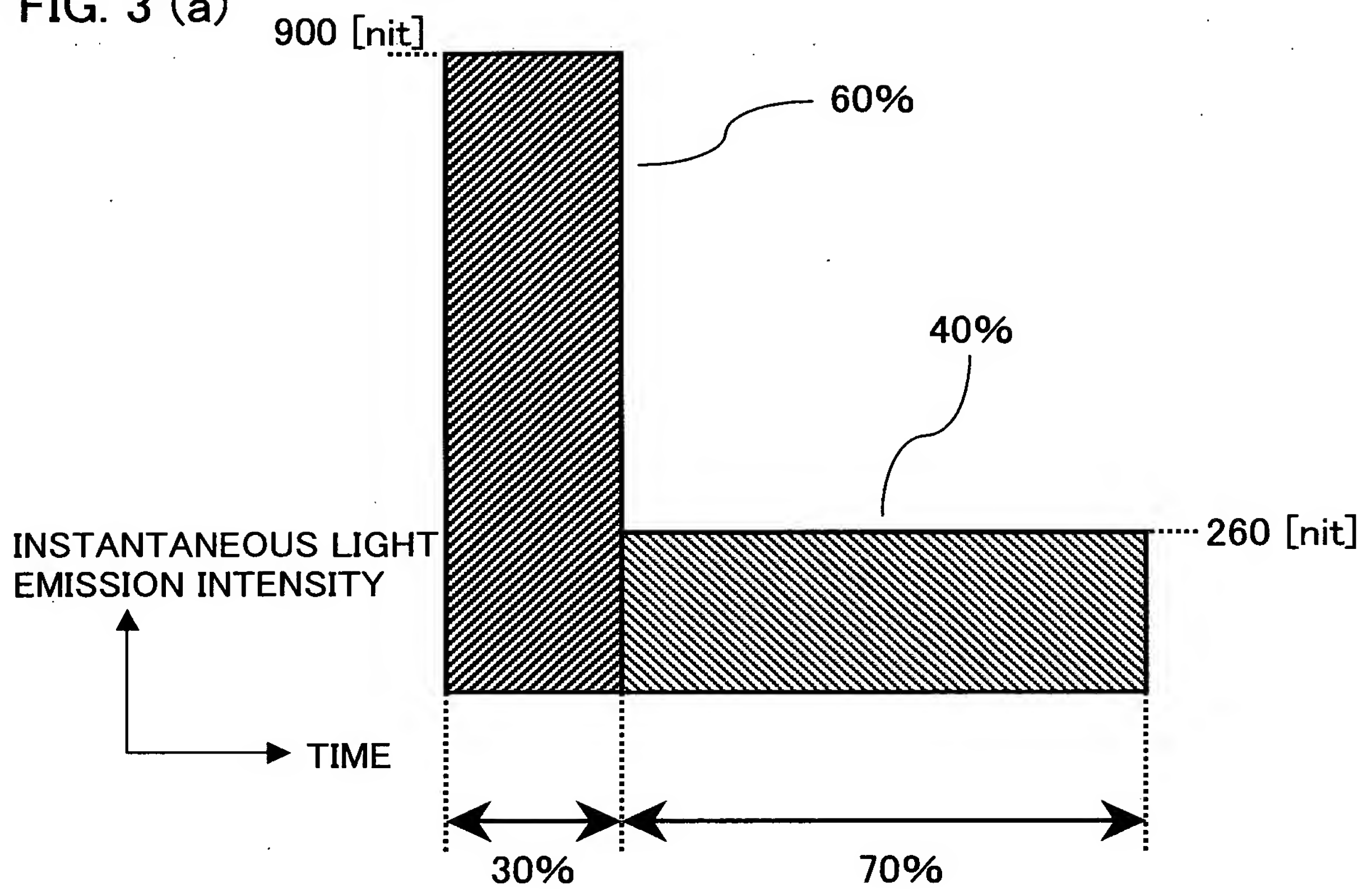


FIG. 3 (b)

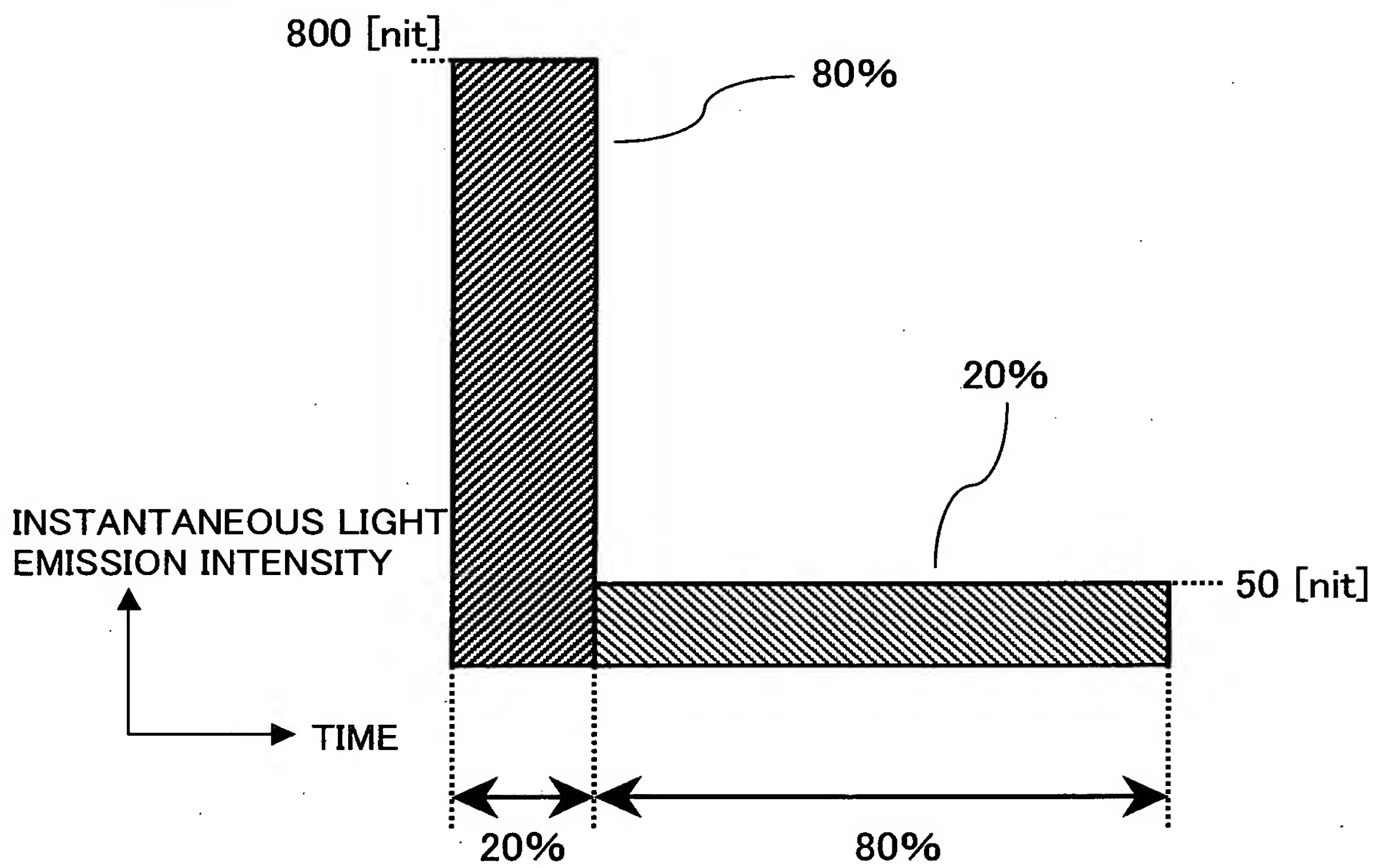


FIG. 4

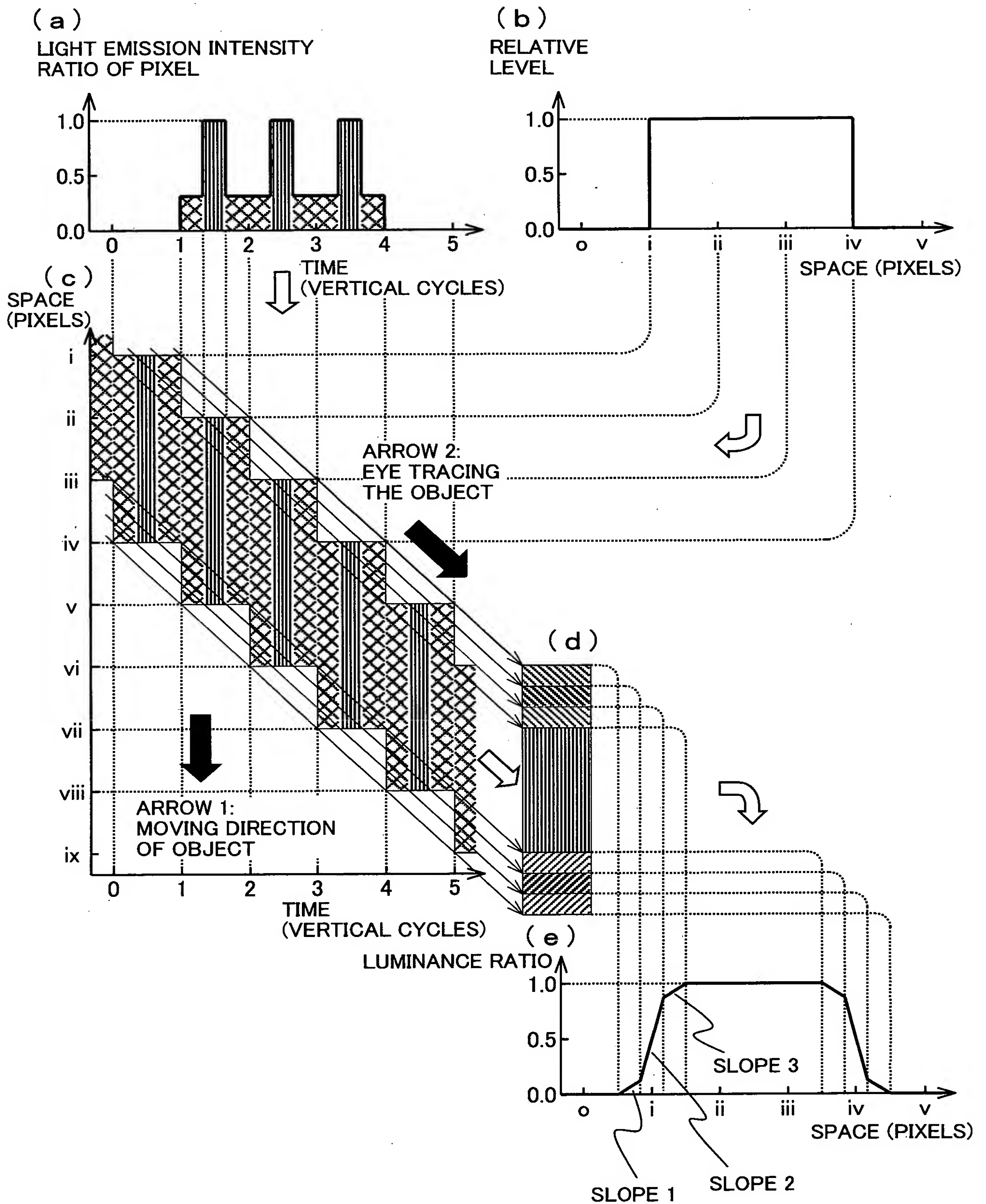


FIG. 5 (a)

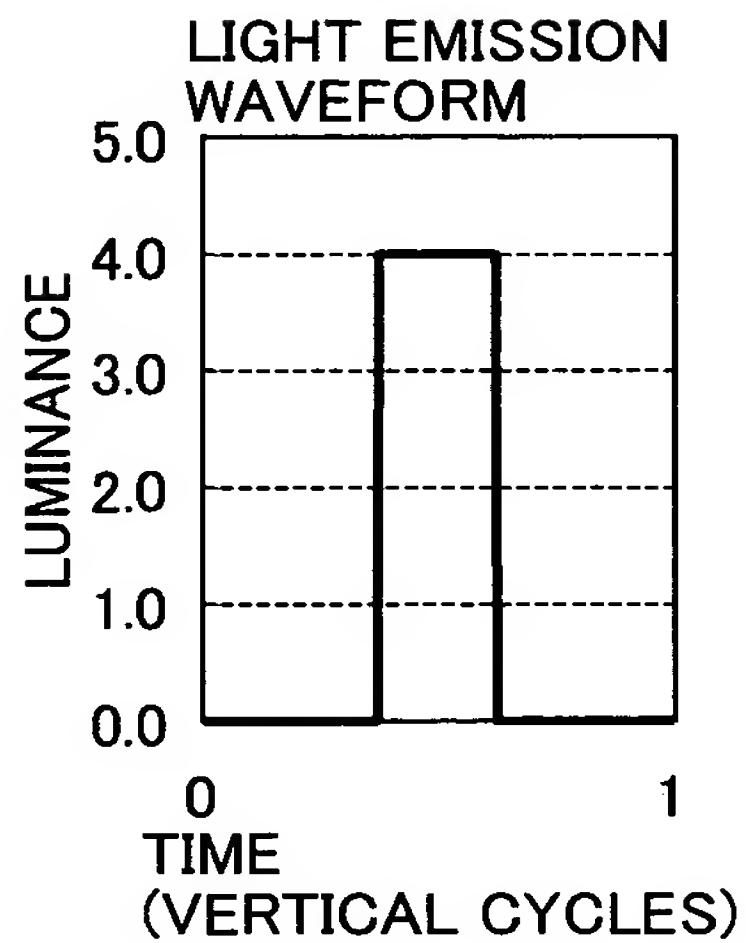


FIG. 5 (b)

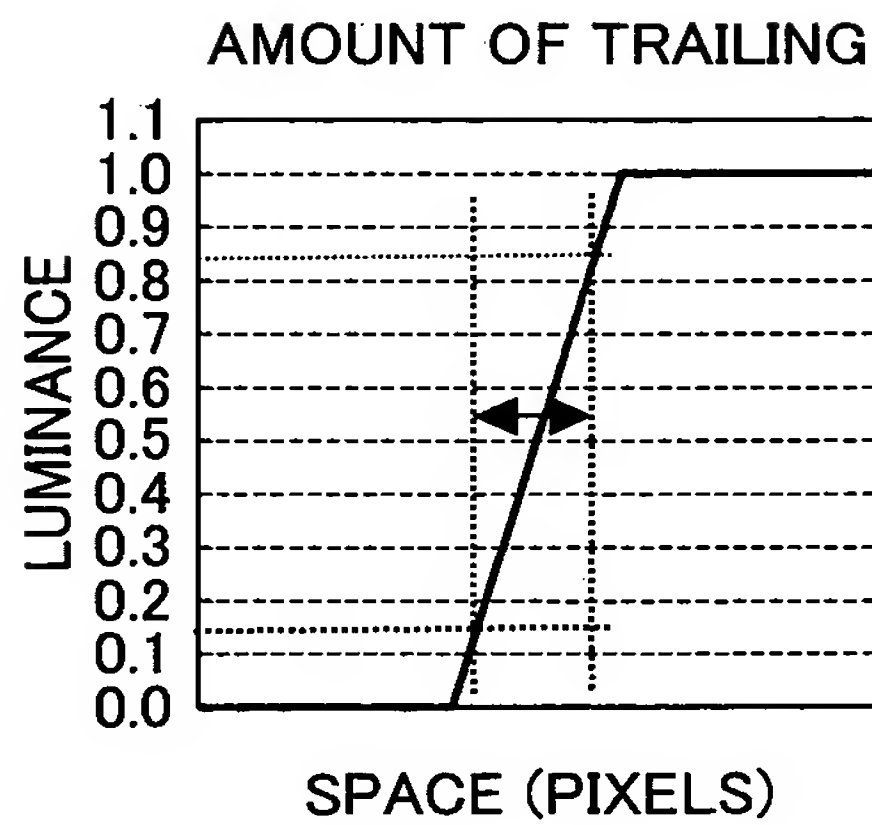


FIG. 5 (c)

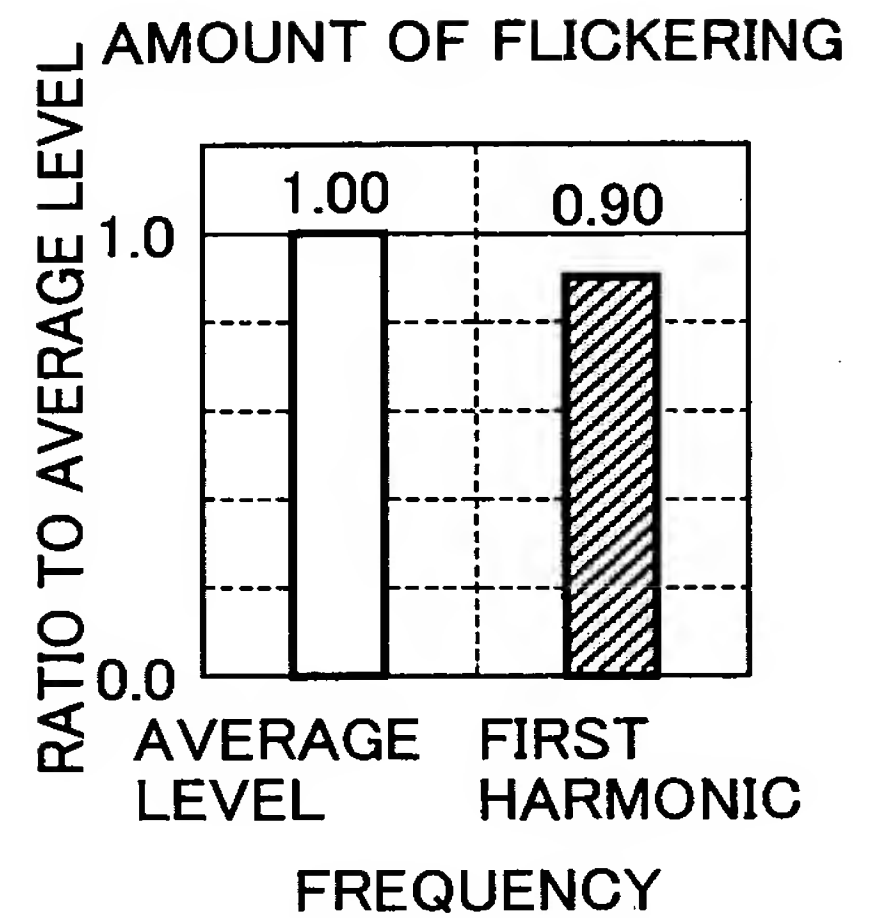


FIG. 5 (d)

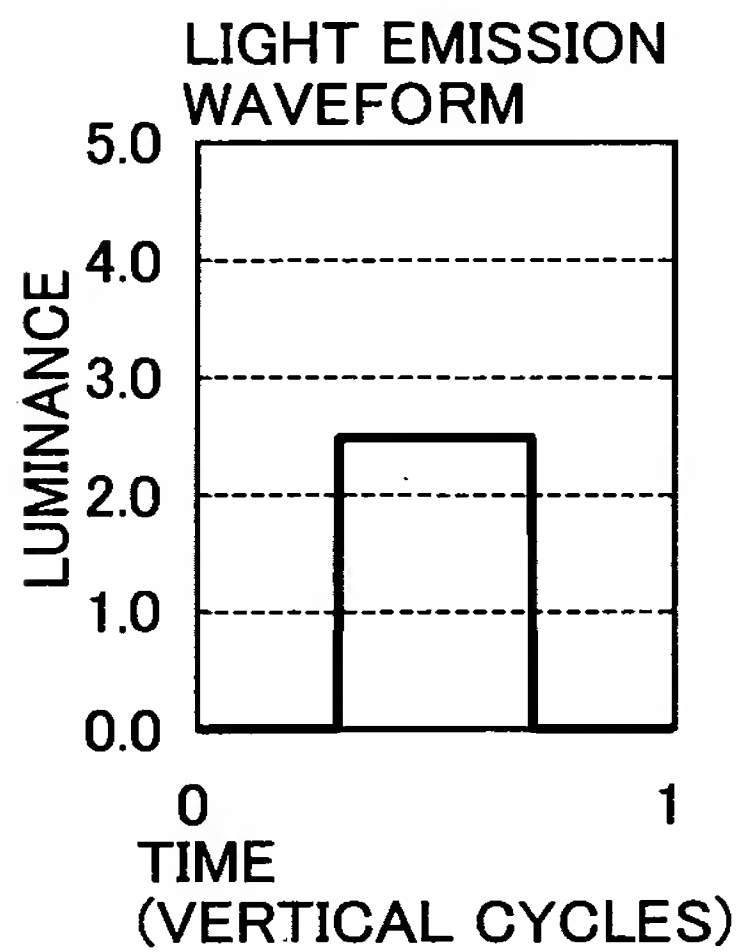


FIG. 5 (e)

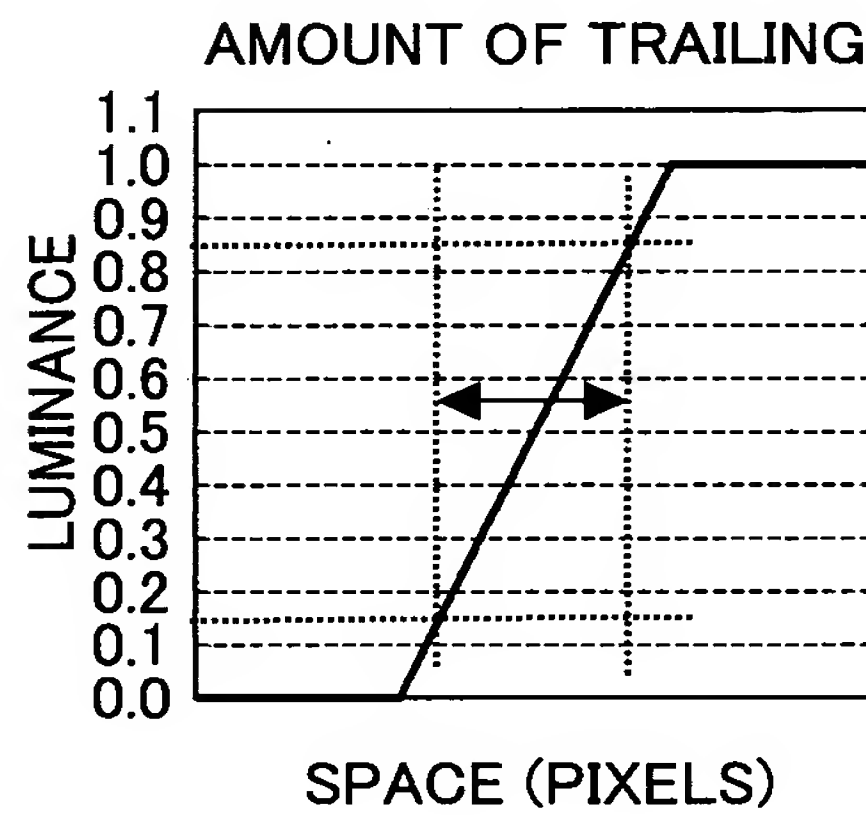


FIG. 5 (f)

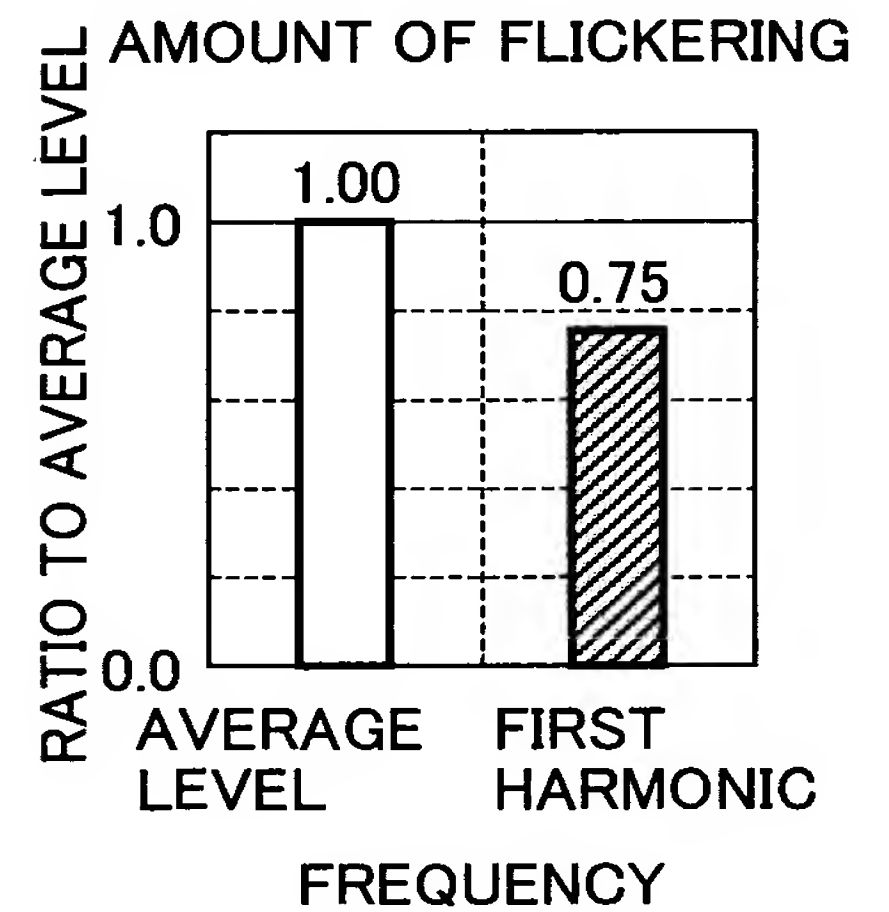


FIG. 5 (g)

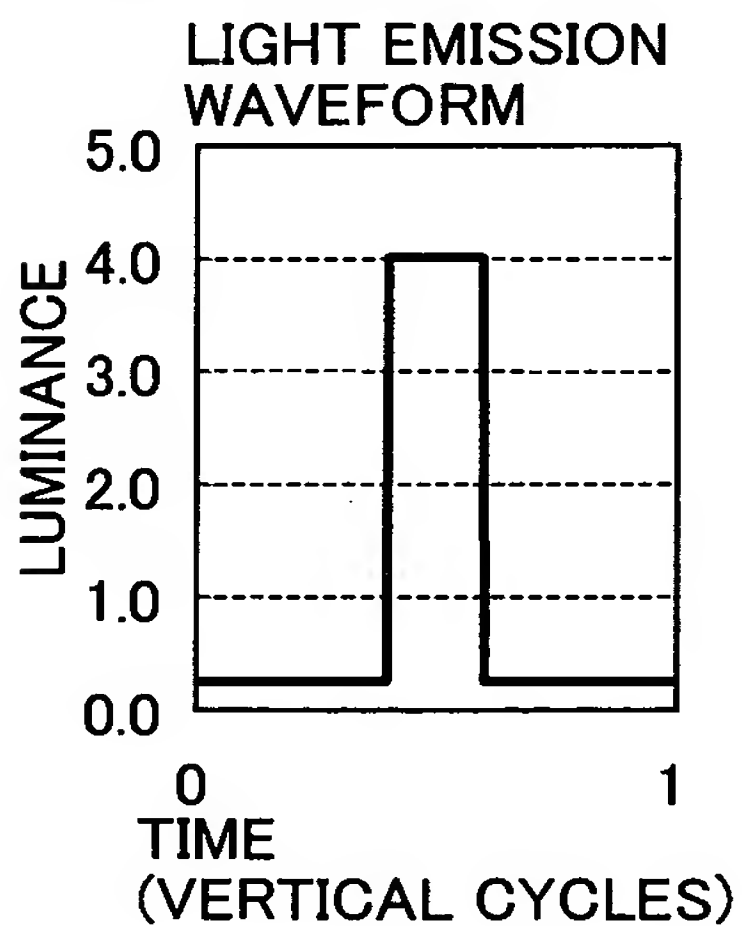


FIG. 5 (h)

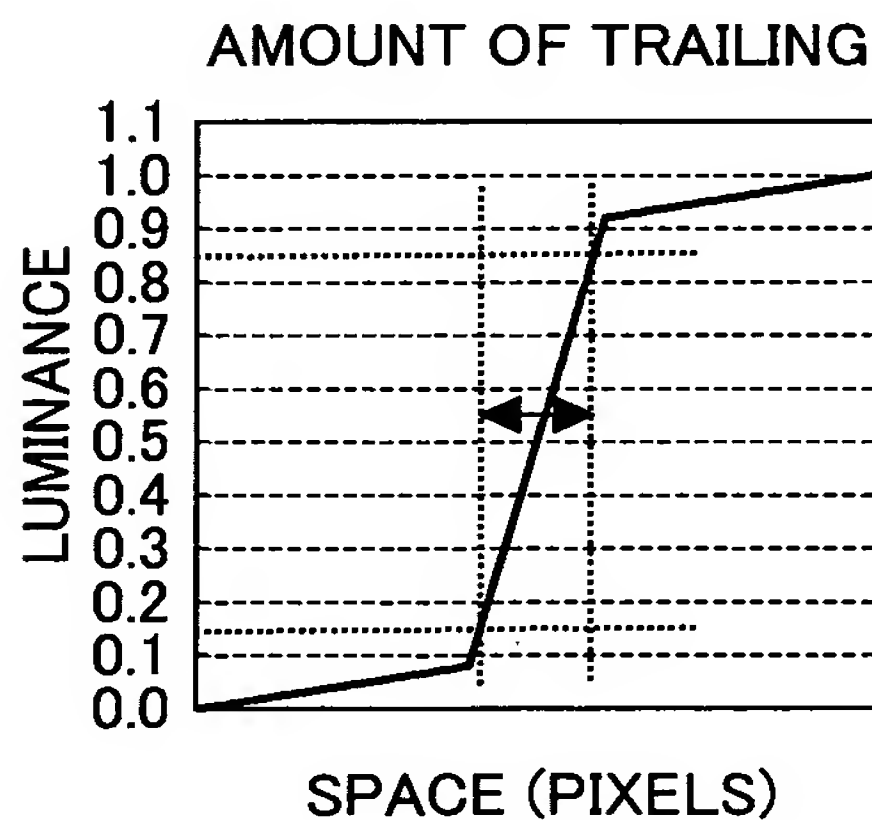


FIG. 5 (i)

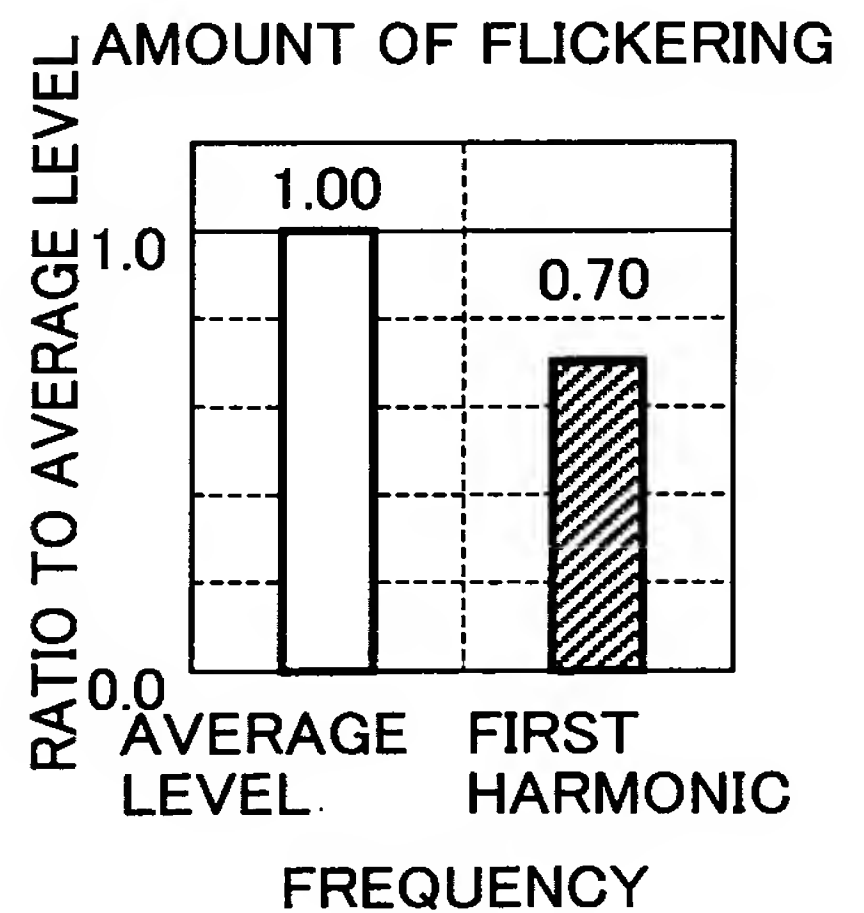


FIG. 6

		COL. 1	COL. 2	COL. 3	COL. 4
		DUTY RATIO D (%) OF FIRST LIGHT EMISSION COMPONENT	LIGHT EMISSION INTENSITY RATIO S (%) OF FIRST LIGHT EMISSION	AMOUNT OF TRAILING (PIXELS)	AMOUNT OF FLICKERING (%)
ROW 1	CONVENTIONAL EX.	25	100	0. 18	90
ROW 2	CONVENTIONAL EX.	40	100	0. 28	7.5
ROW 3	PRESENT EMBODIMENT.	20	80	0. 18	70

FIG. 7

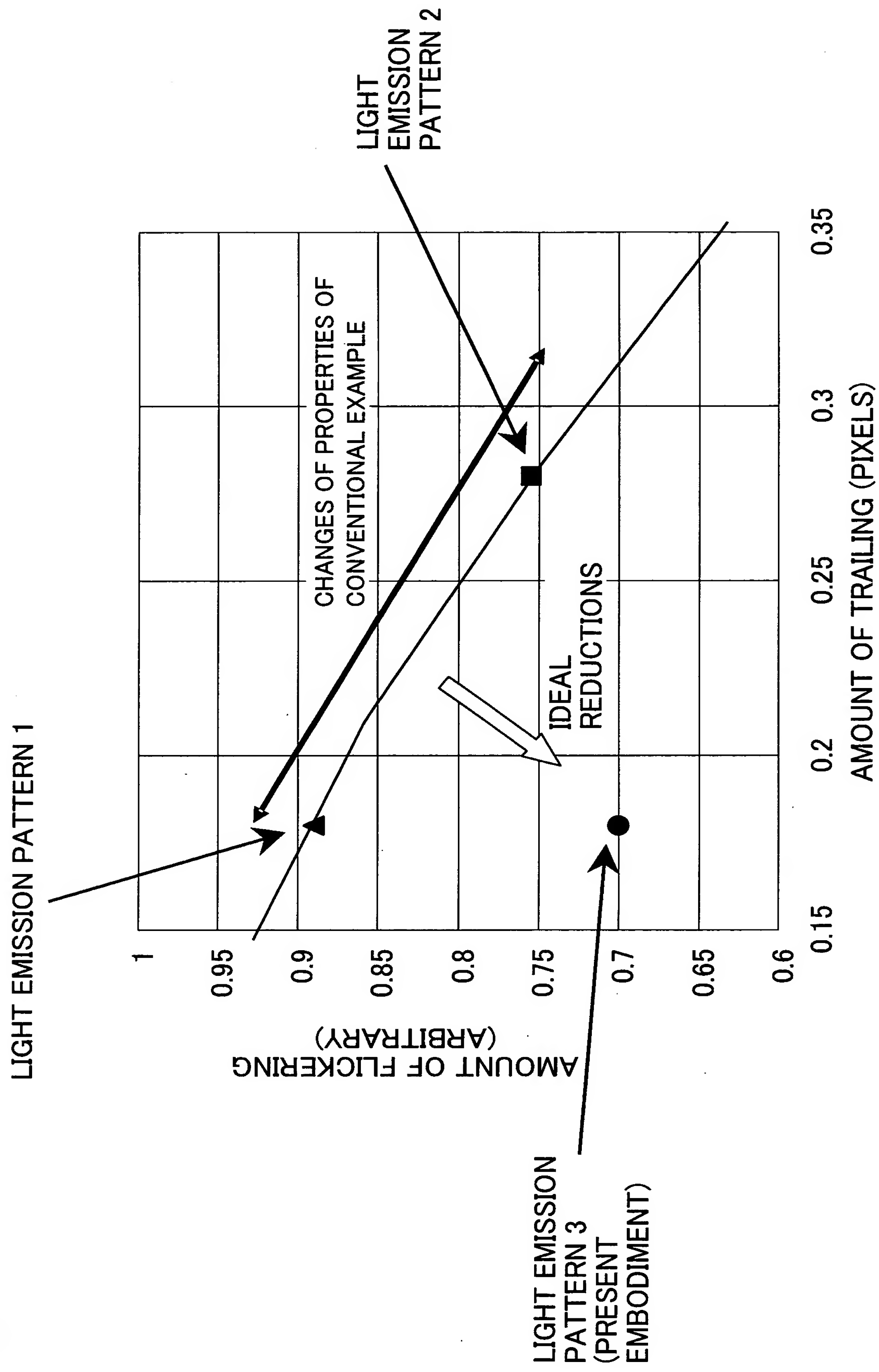


FIG. 8 (a)

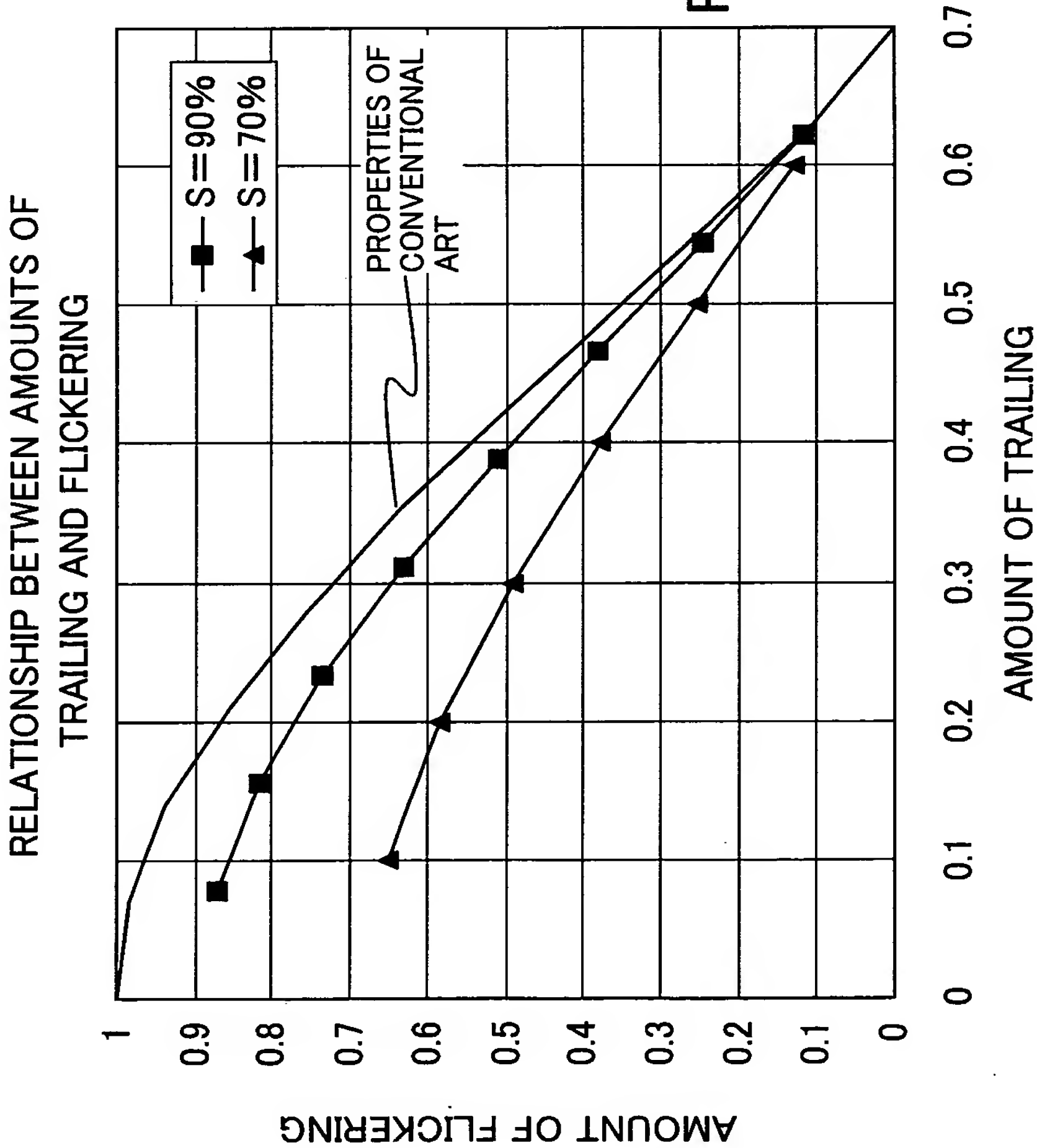


FIG. 8 (b)

DUTY RATIO D	AMOUNT OF TRAILING	AMOUNT OF FLICKERING
10	0.08	0.87
20	0.16	0.82
30	0.23	0.74
40	0.31	0.63
50	0.39	0.51
60	0.47	0.38
70	0.54	0.25
80	0.62	0.12

DATA WHEN S IS FIXED AT 90%

FIG. 8 (c)

DUTY RATIO D	AMOUNT OF TRAILING	AMOUNT OF FLICKERING
10	0.10	0.65
20	0.20	0.58
30	0.30	0.49
40	0.40	0.38
50	0.50	0.25
60	0.60	0.13

DATA WHEN S IS FIXED AT 70%

FIG. 9 (a)

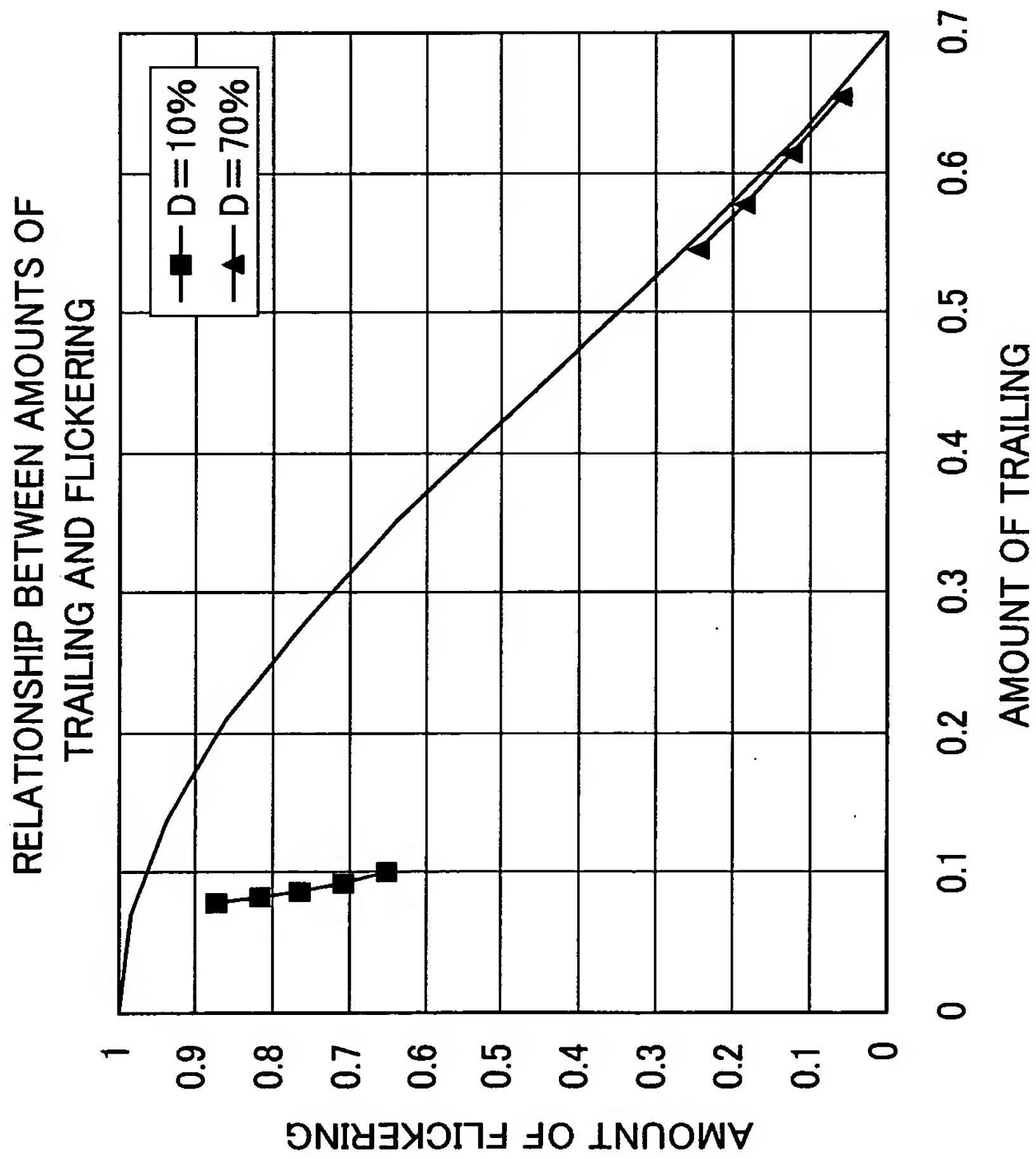


FIG. 9 (b)

INTENSITY RATIO S OF FIRST LIGHT EMISSION COMPONENT	AMOUNT OF TRAILING	AMOUNT OF FLICKERING
90	0.08	0.87
85	0.08	0.82
80	0.09	0.76
75	0.09	0.71
70	0.10	0.65

D IS FIXED AT 10%

FIG. 9 (c)

INTENSITY RATIO S OF FIRST LIGHT EMISSION COMPONENT	AMOUNT OF TRAILING	AMOUNT OF FLICKERING
90	0.54	0.25
85	0.58	0.18
80	0.61	0.12
75	0.65	0.06

D IS FIXED AT 70%

FIG. 10 (a)

RELATIONSHIP BETWEEN AMOUNTS OF TRAILING AND FLICKERING

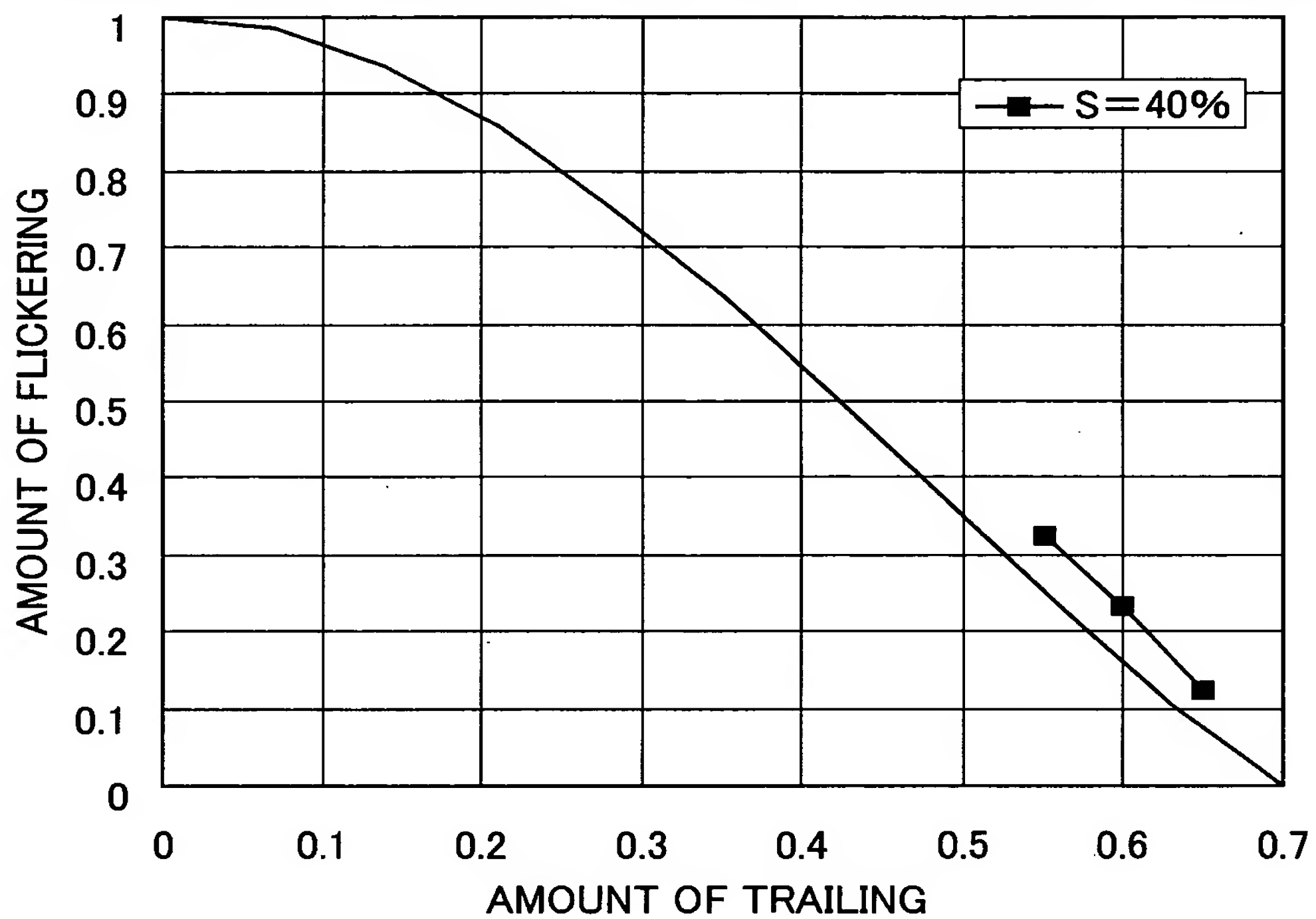


FIG. 10 (b)

DUTY RATIO D	AMOUNT OF TRAILING	AMOUNT OF FLICKERING
10	0.55	0.323
20	0.6	0.2333
30	0.65	0.1228

S FIXED AT 40%

FIG. 11 (a)

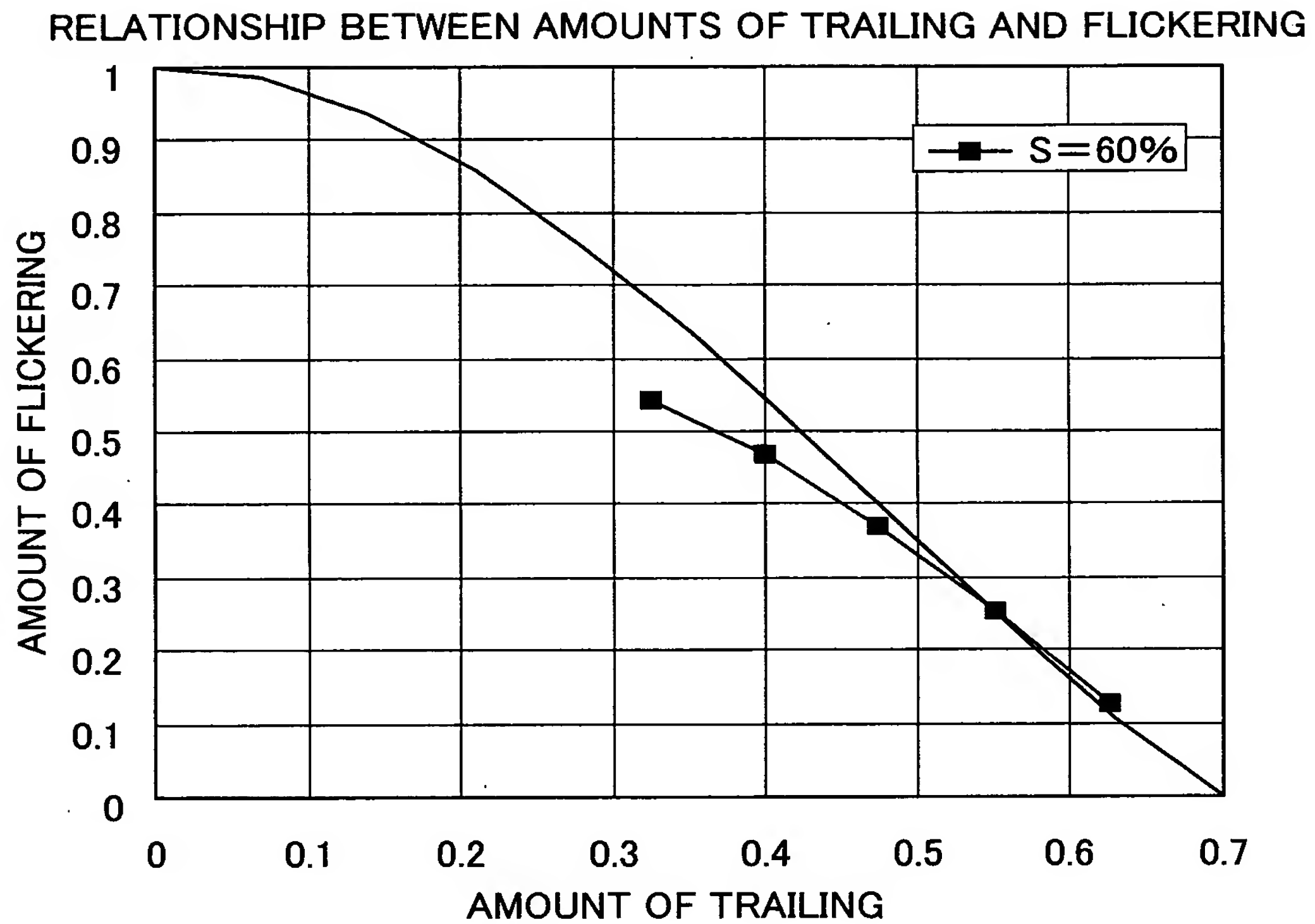


FIG. 11 (b)

DUTY RATIO D	AMOUNT OF TRAILING	AMOUNT OF FLICKERING
10	0.325	0.5411
20	0.4	0.4671
30	0.475	0.3681
40	0.55	0.2524
50	0.625	0.1273

S FIXED AT 60%

FIG. 12

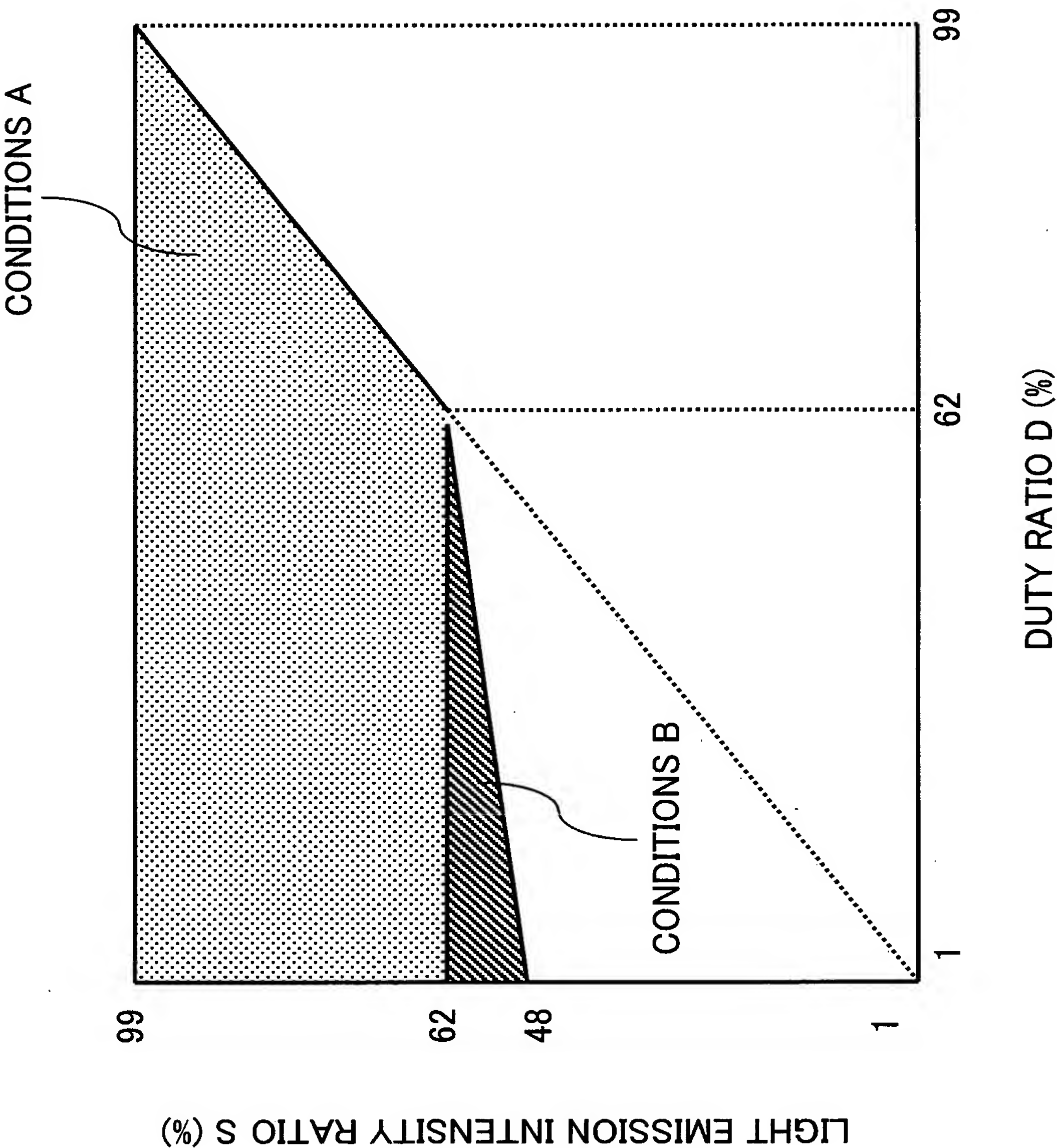


FIG. 13 (a)

RELATIONSHIP BETWEEN AMOUNTS OF TRAILING AND FLICKERING

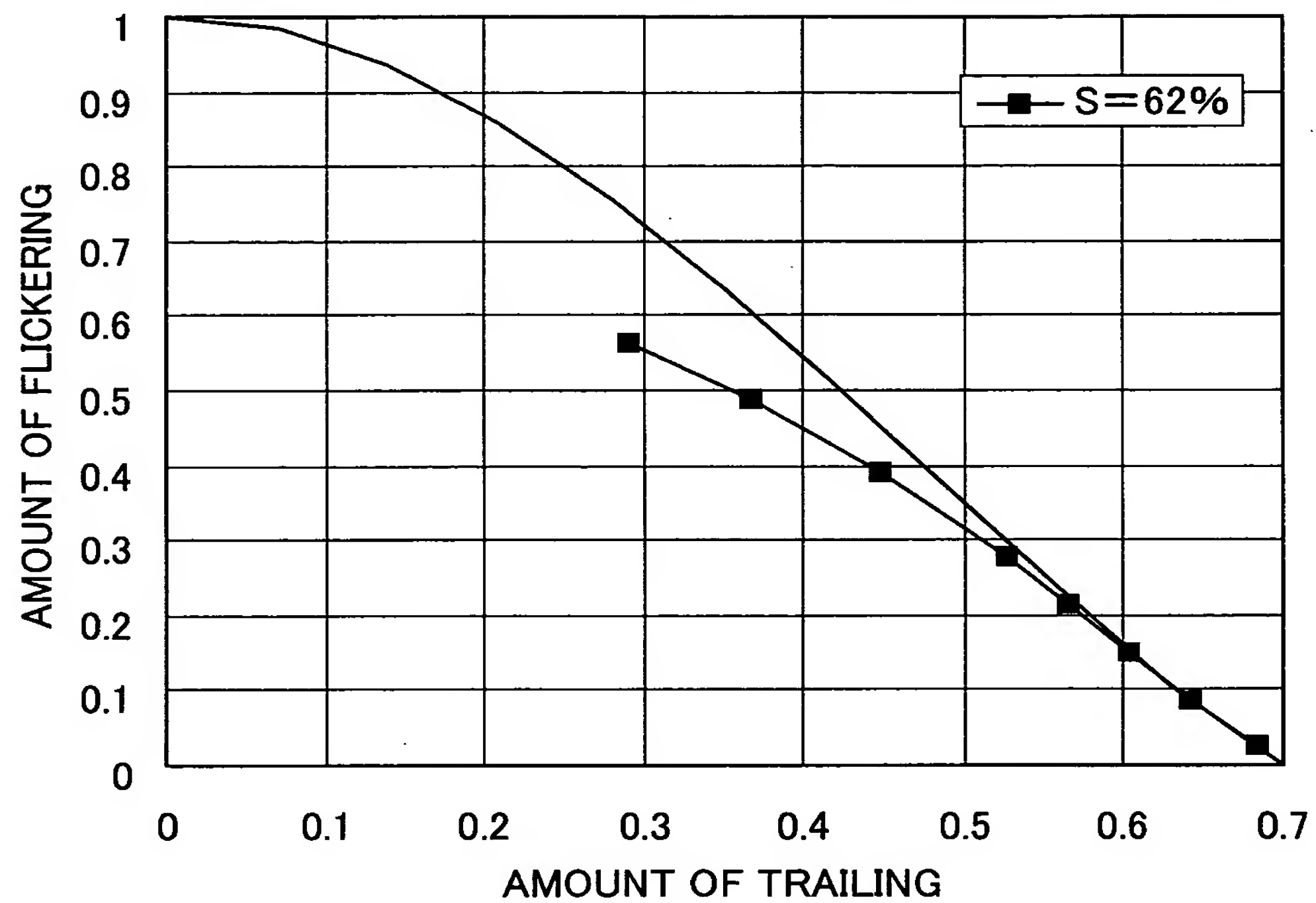


FIG. 13 (b)

DUTY RATIO D	AMOUNT OF TRAILING	AMOUNT OF FLICKERING
10	0.29	0.56
20	0.37	0.49
30	0.45	0.39
40	0.53	0.28
45	0.57	0.22
50	0.60	0.15
55	0.64	0.09
60	0.68	0.03

S FIXED AT 62%

FIG. 14 (a)

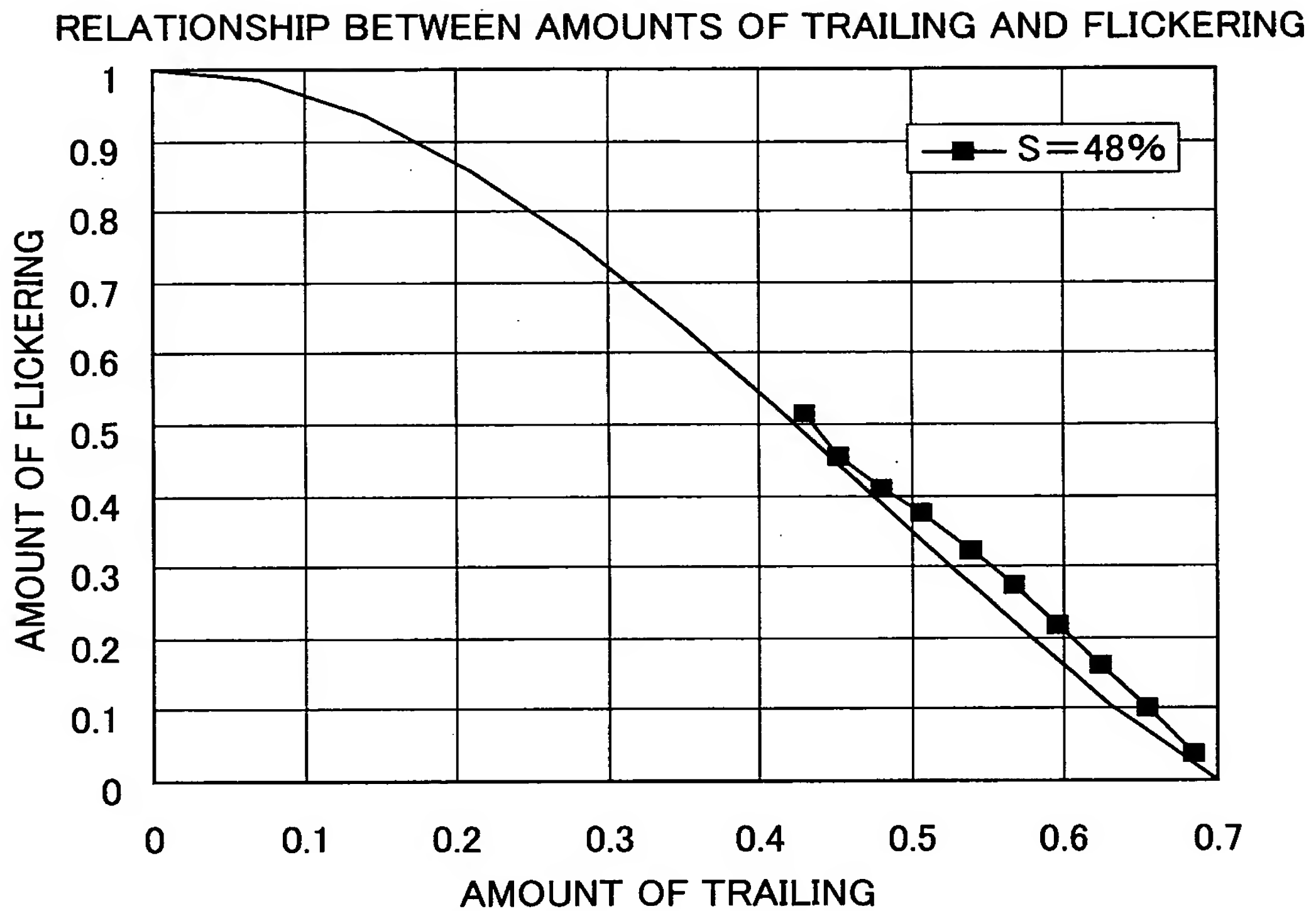


FIG. 14 (b)

DUTY RATIO D	AMOUNT OF TRAILING	AMOUNT OF FLICKERING
1	0.43	0.51
5	0.45	0.45
10	0.48	0.41
15	0.51	0.38
20	0.54	0.33
25	0.57	0.28
30	0.60	0.22
35	0.62	0.16
40	0.65	0.10
45	0.68	0.04

S FIXED AT 48%

FIG. 15 (a)

UPPER LIMITS OF DUTY RATIO

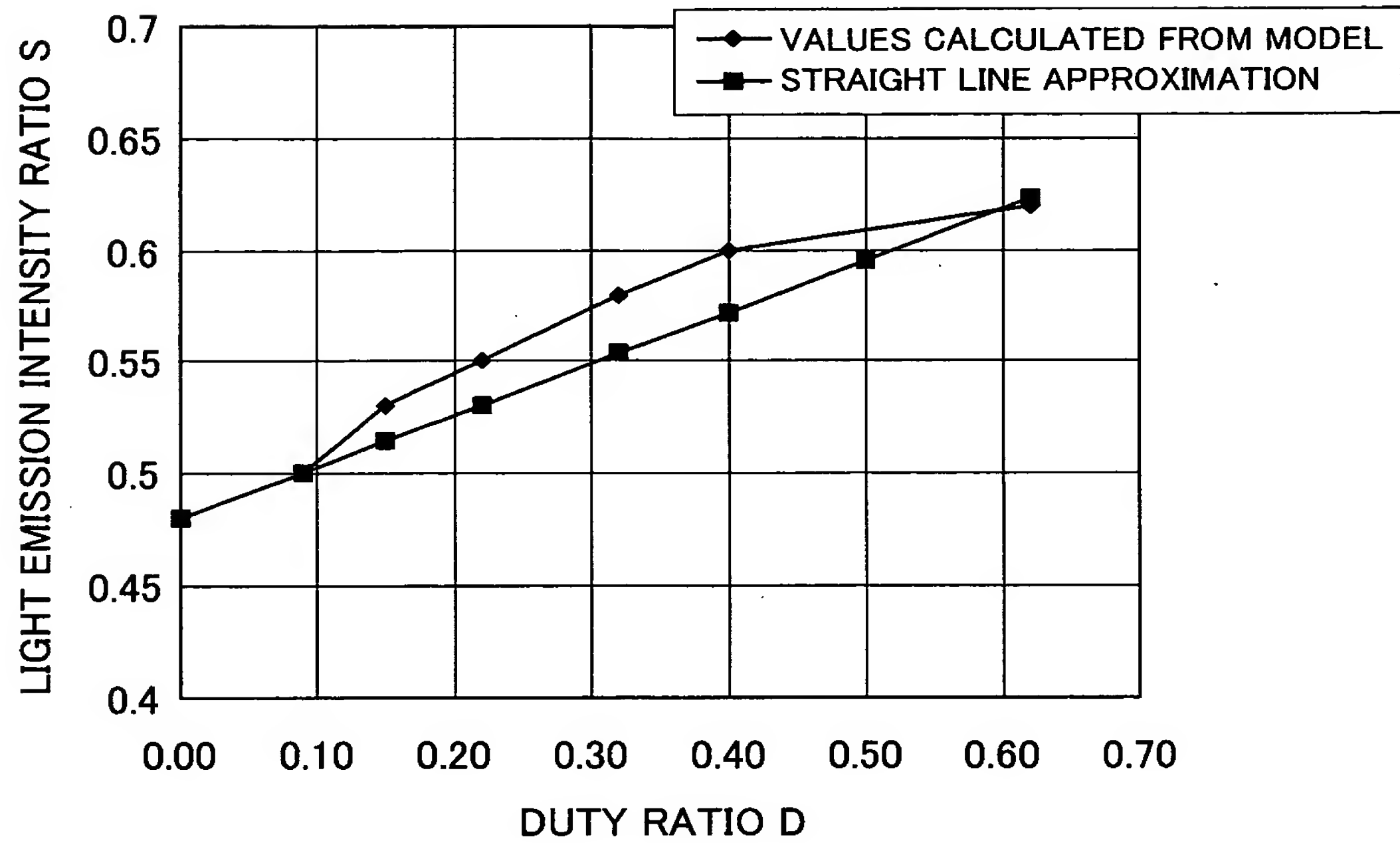


FIG. 15 (b)

DUTY RATIO D	LIGHT EMISSION INTENSITY RATIO S
0.09	0.5
0.15	0.53
0.22	0.55
0.32	0.58
0.4	0.6
0.619	0.62

VALUES CALCULATED FROM MODEL

FIG. 16 (a)

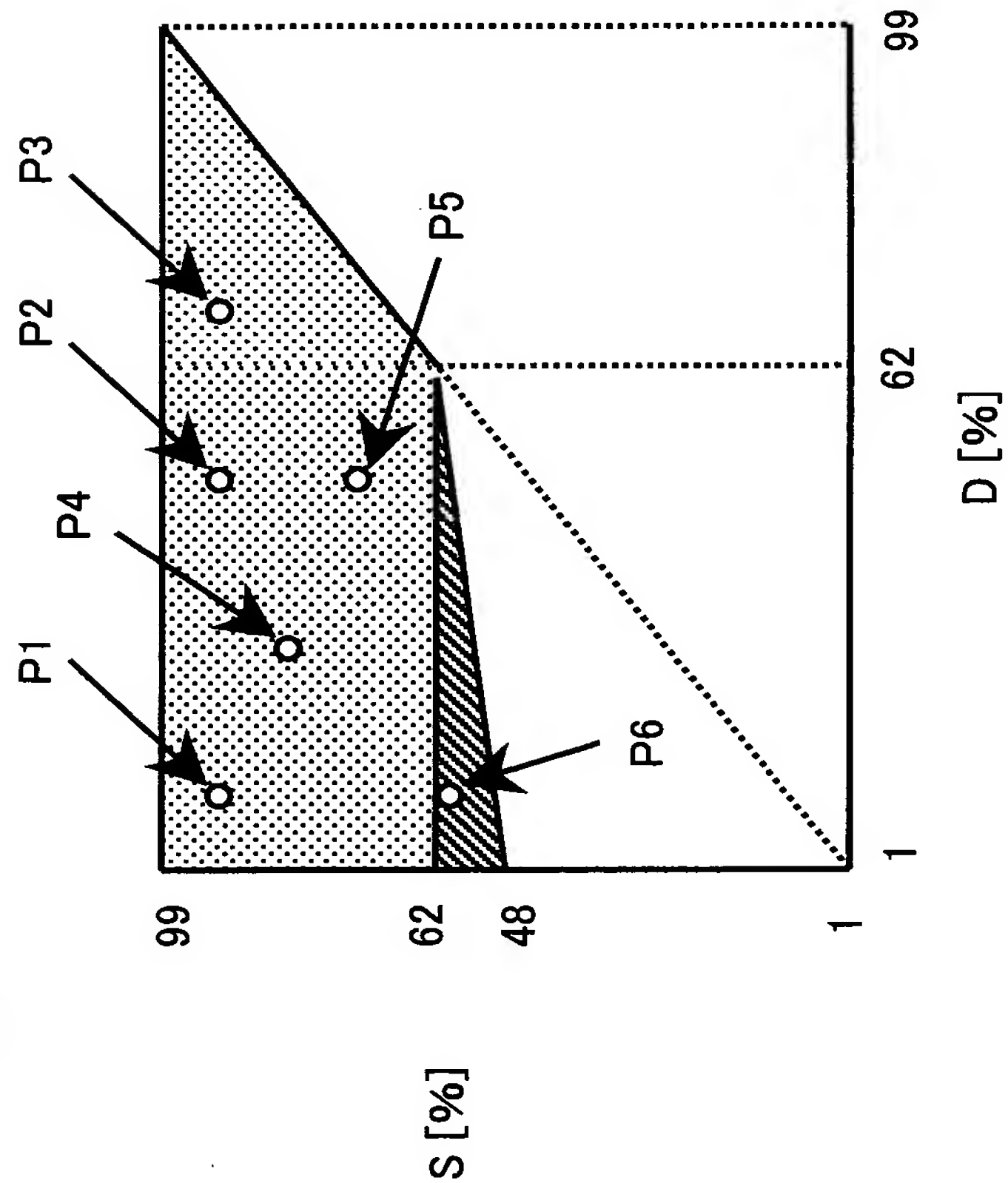


FIG. 16 (b)

POINT	D (%)	S (%)	AMOUNT OF TRAILING	AMOUNT OF FLICKERING
P1	0.1	0.9	0.08	0.87
P2	0.5	0.9	0.39	0.51
P3	0.7	0.9	0.54	0.25
P4	0.3	0.8	0.26	0.61
P5	0.5	0.7	0.5	0.25
P6	0.1	0.6	0.33	0.54

FIG. 16 (c)

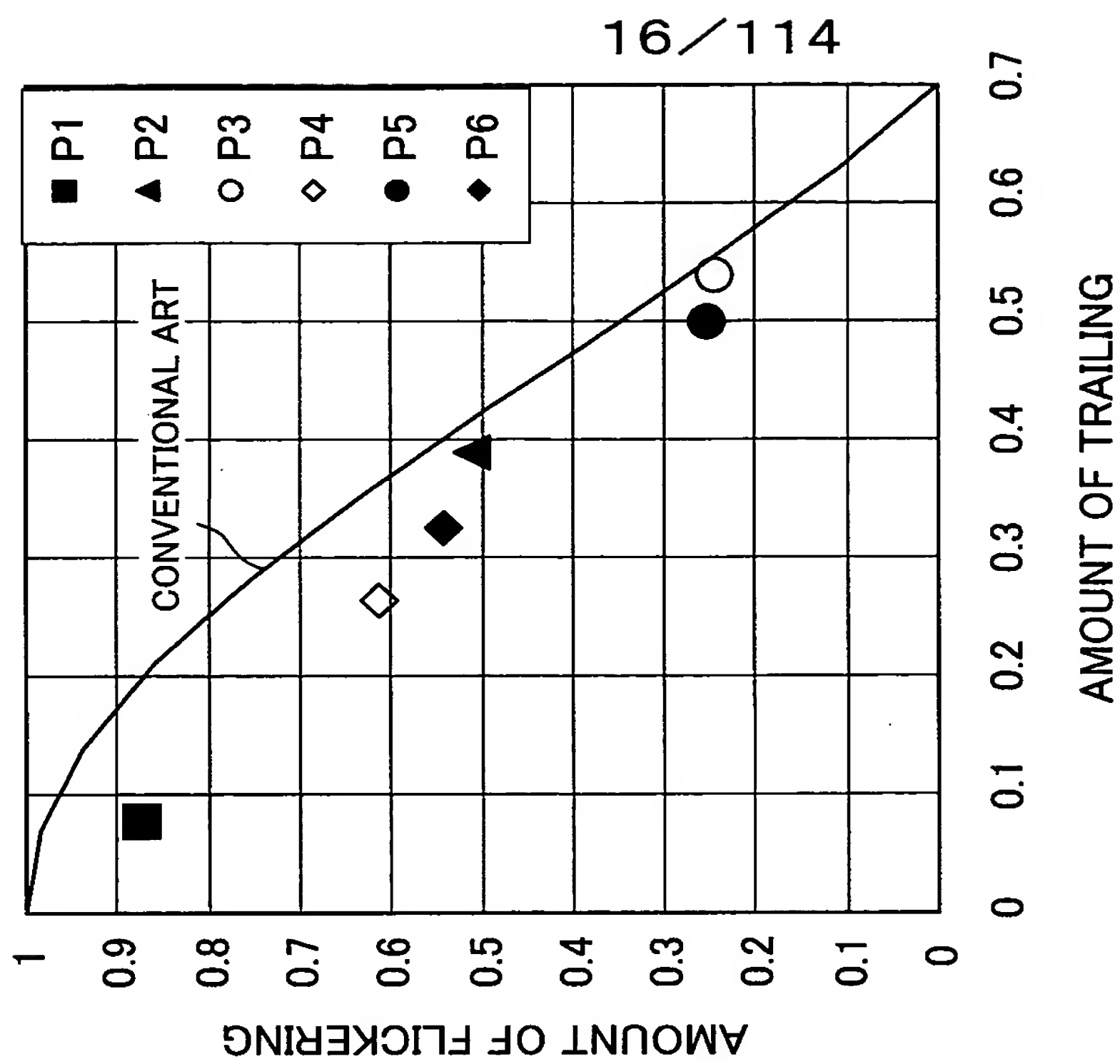


FIG. 17 (a)

INSTANTANEOUS LIGHT EMISSION INTENSITY

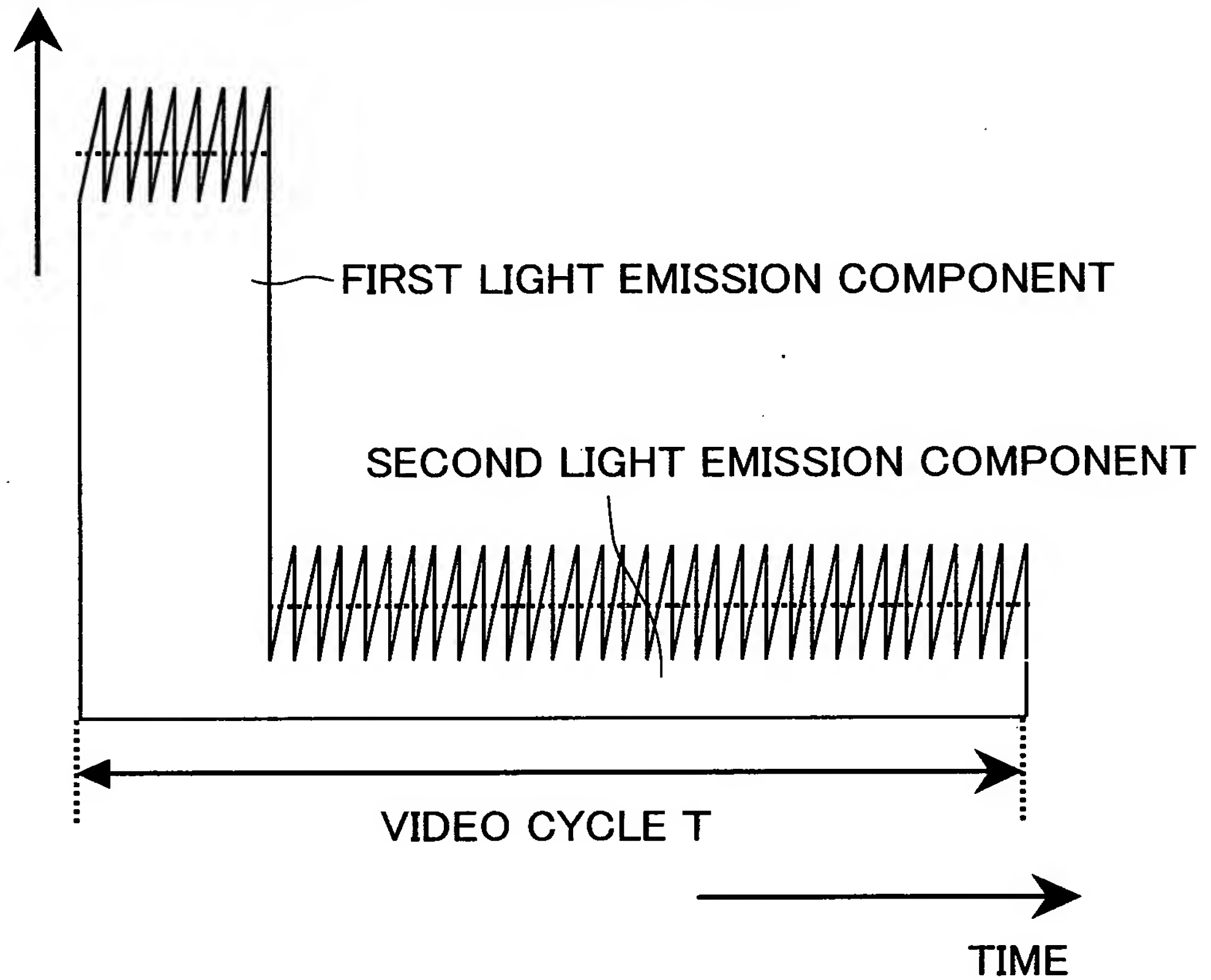


FIG. 17 (b)

INSTANTANEOUS LIGHT EMISSION INTENSITY

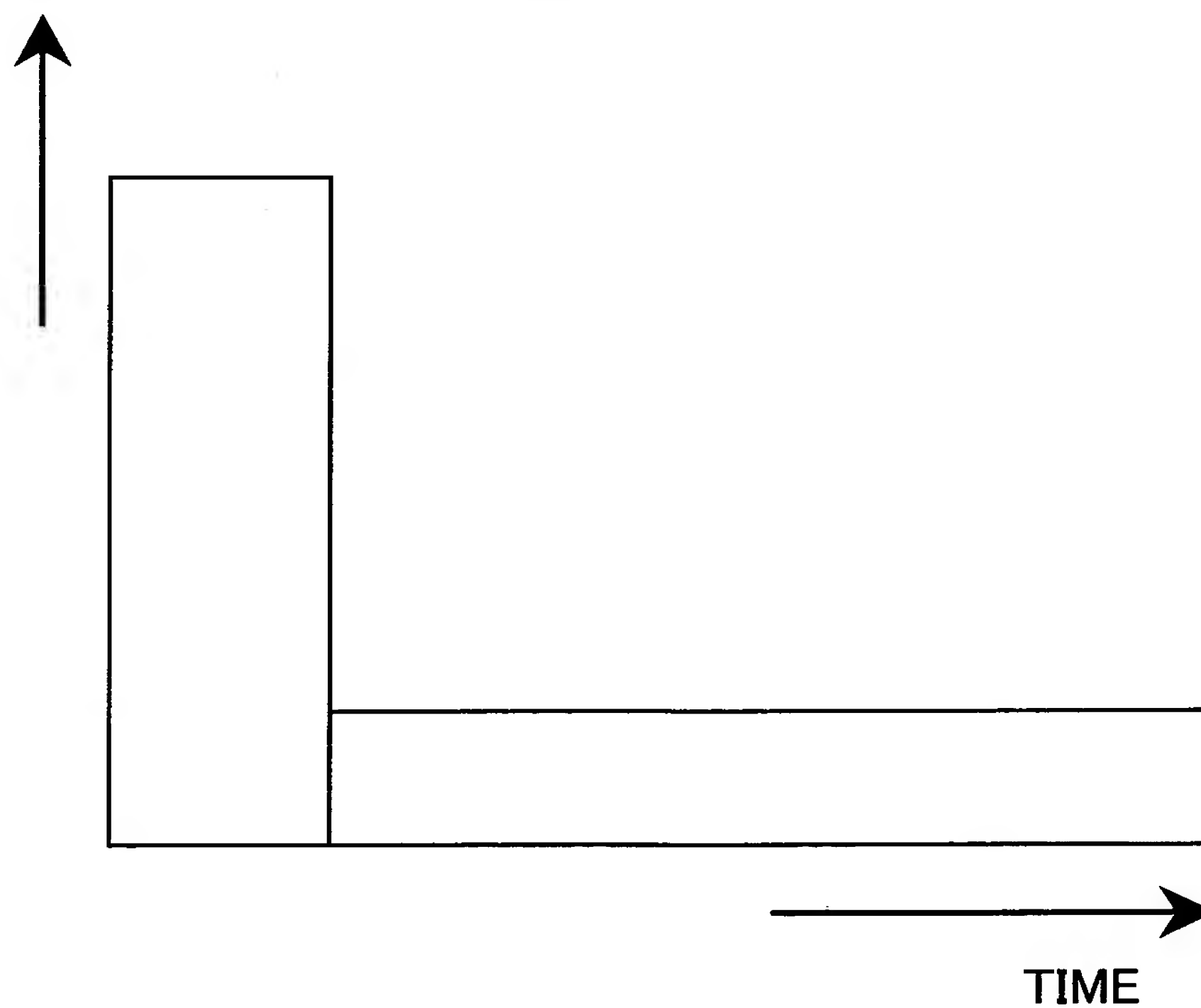


FIG. 18 (a)

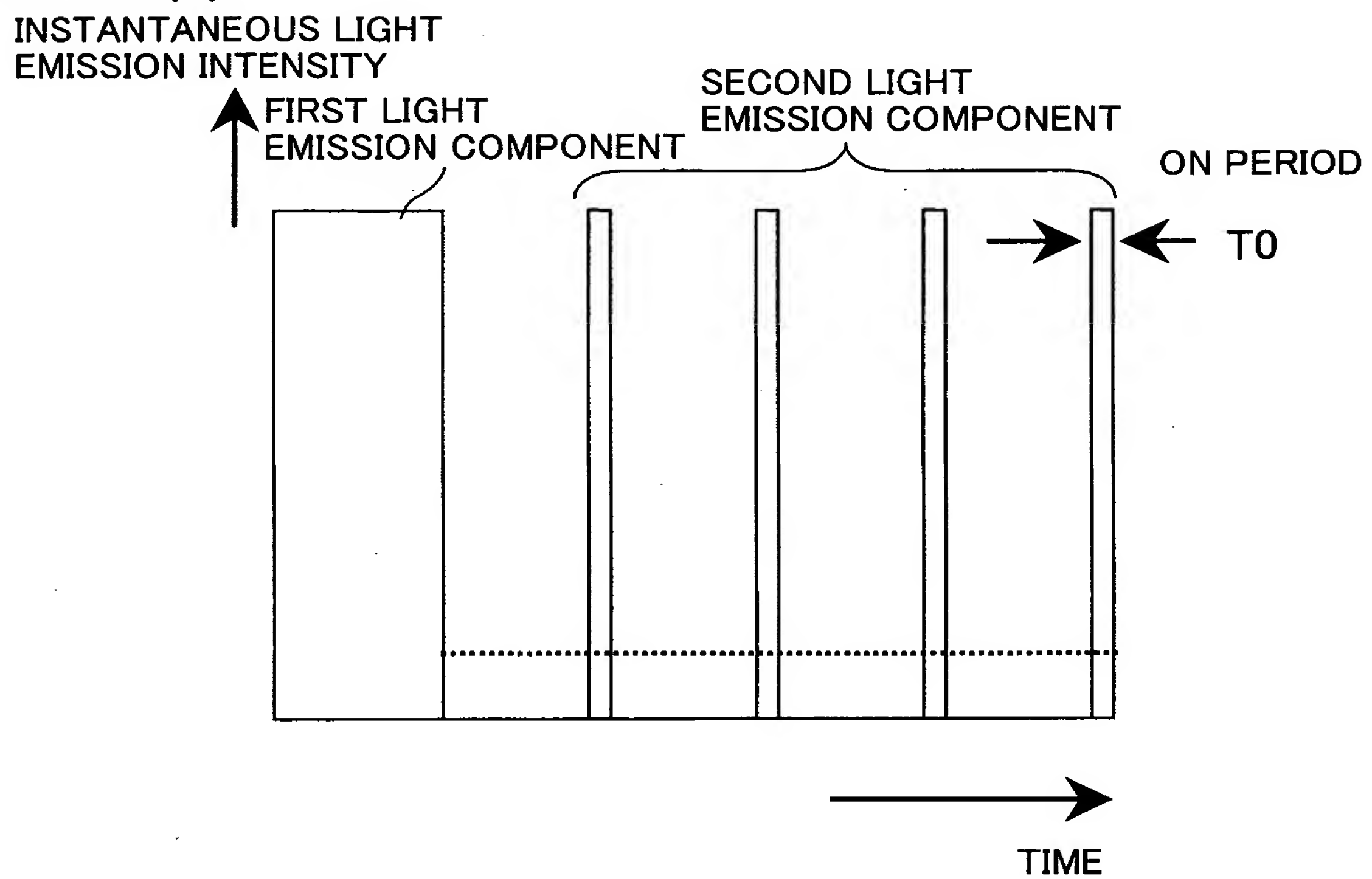


FIG. 18 (b)

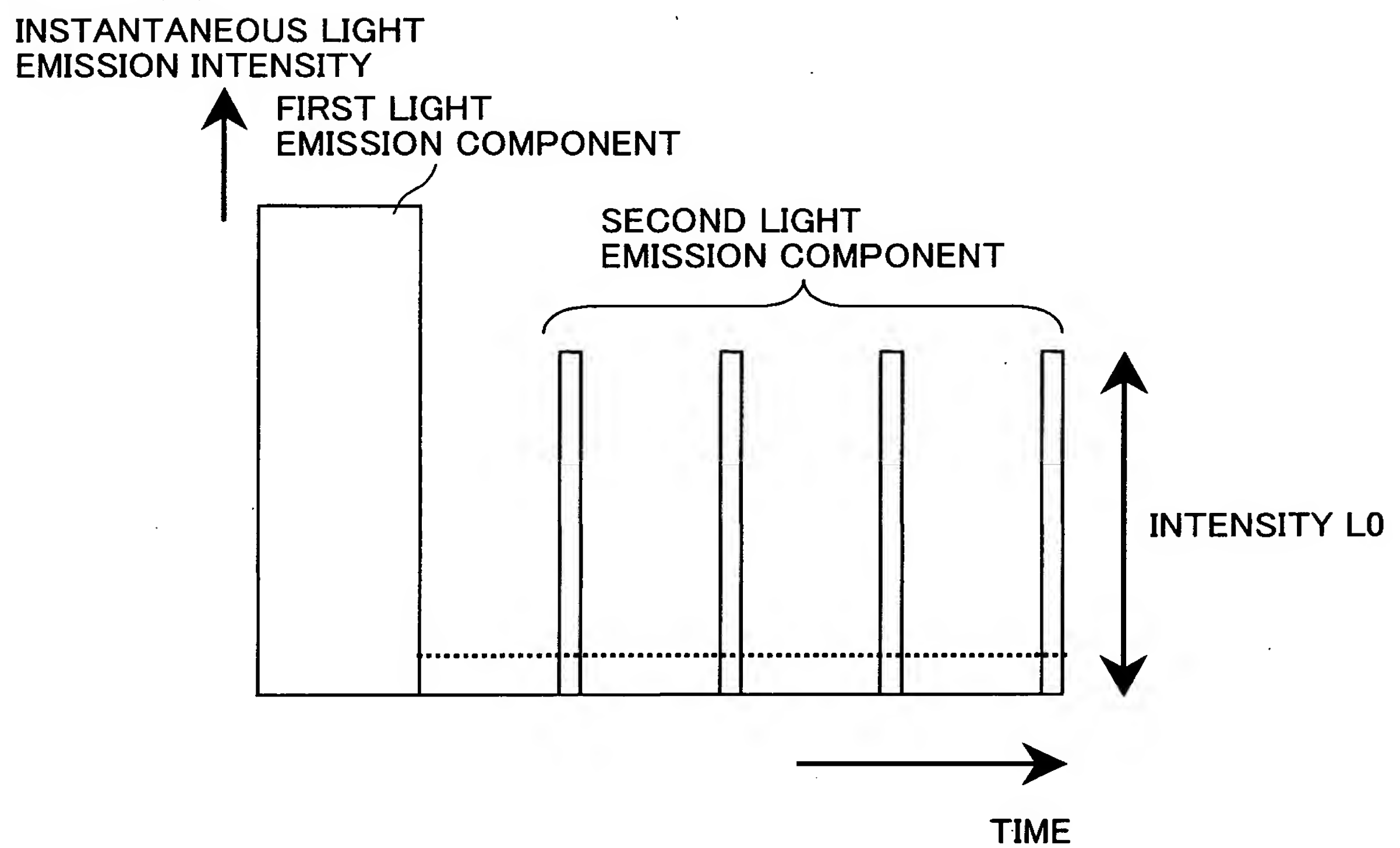


FIG. 19

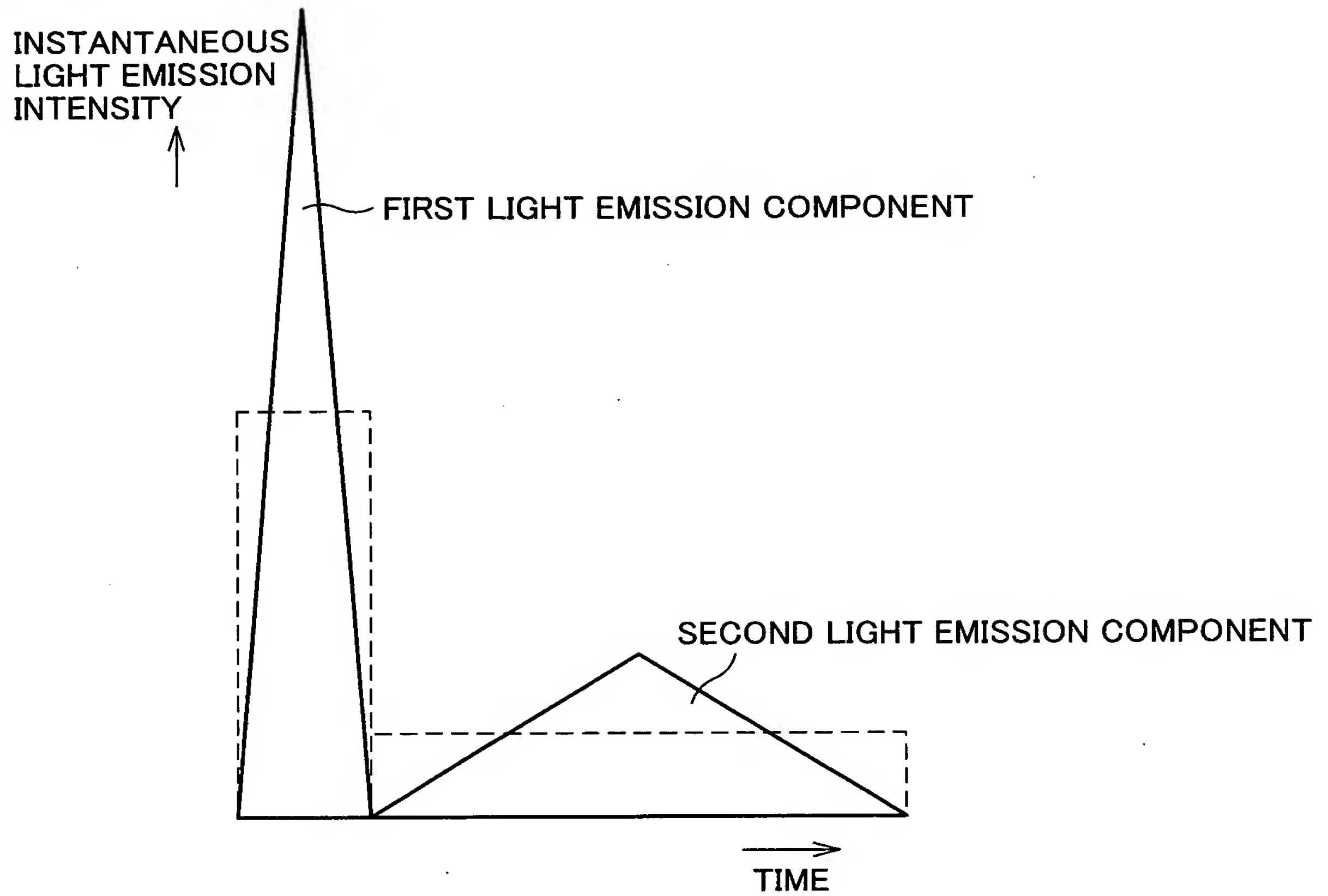


FIG. 20

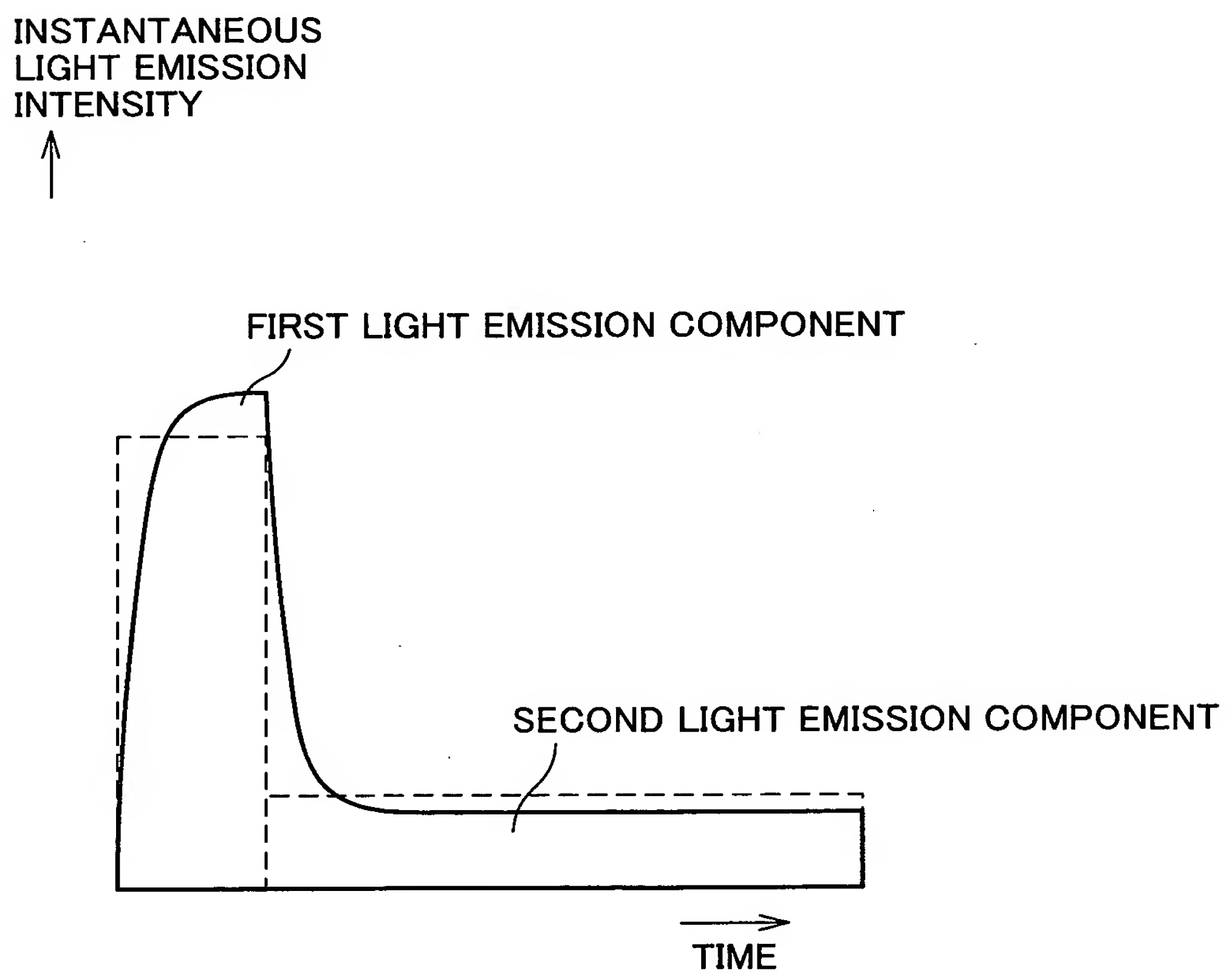


FIG. 21

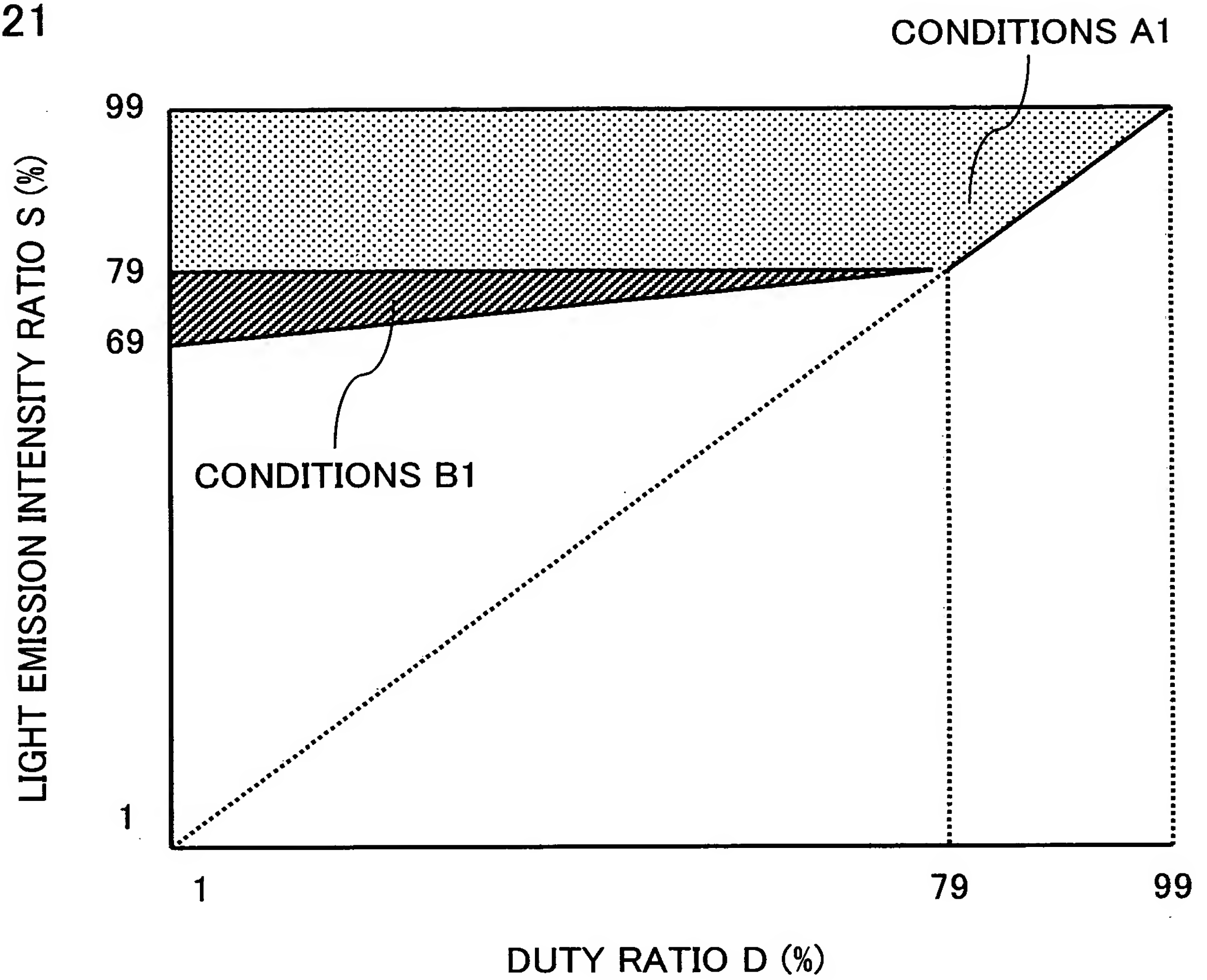


FIG. 22 (a)

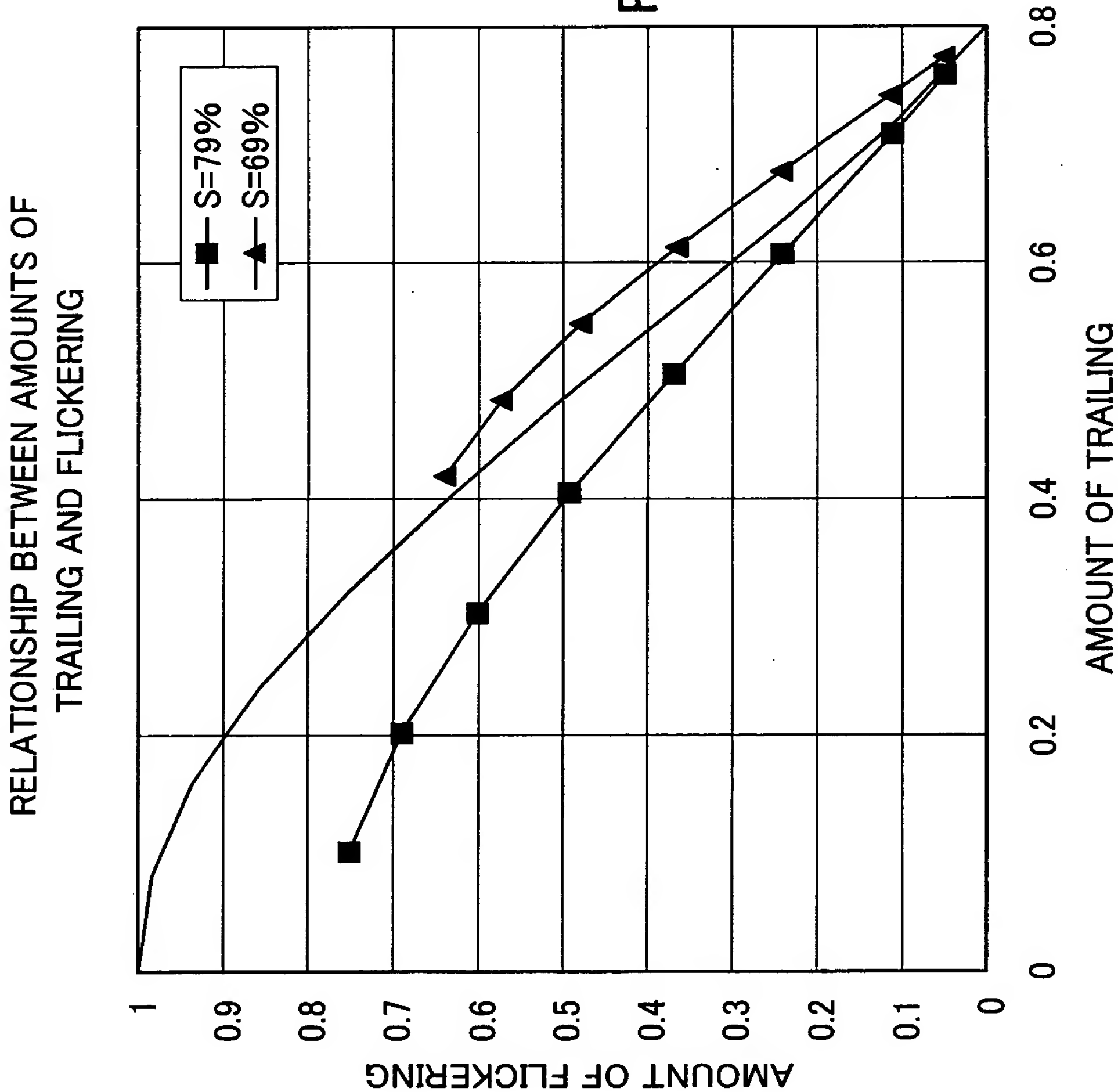


FIG. 22 (b)

DUTY RATIO D	AMOUNT OF TRAILING	AMOUNT OF FLICKERING
10	0.42	0.64
20	0.48	0.57
30	0.55	0.48
40	0.61	0.37
50	0.68	0.24
60	0.74	0.11
65	0.77	0.05

S FIXED AT 69%

FIG. 22 (c)

DUTY RATIO D	AMOUNT OF TRAILING	AMOUNT OF FLICKERING
10	0.10	0.75
20	0.20	0.69
30	0.30	0.60
40	0.41	0.49
50	0.51	0.37
60	0.61	0.24
70	0.71	0.11
75	0.76	0.05

S FIXED AT 79%

FIG. 23 (a)

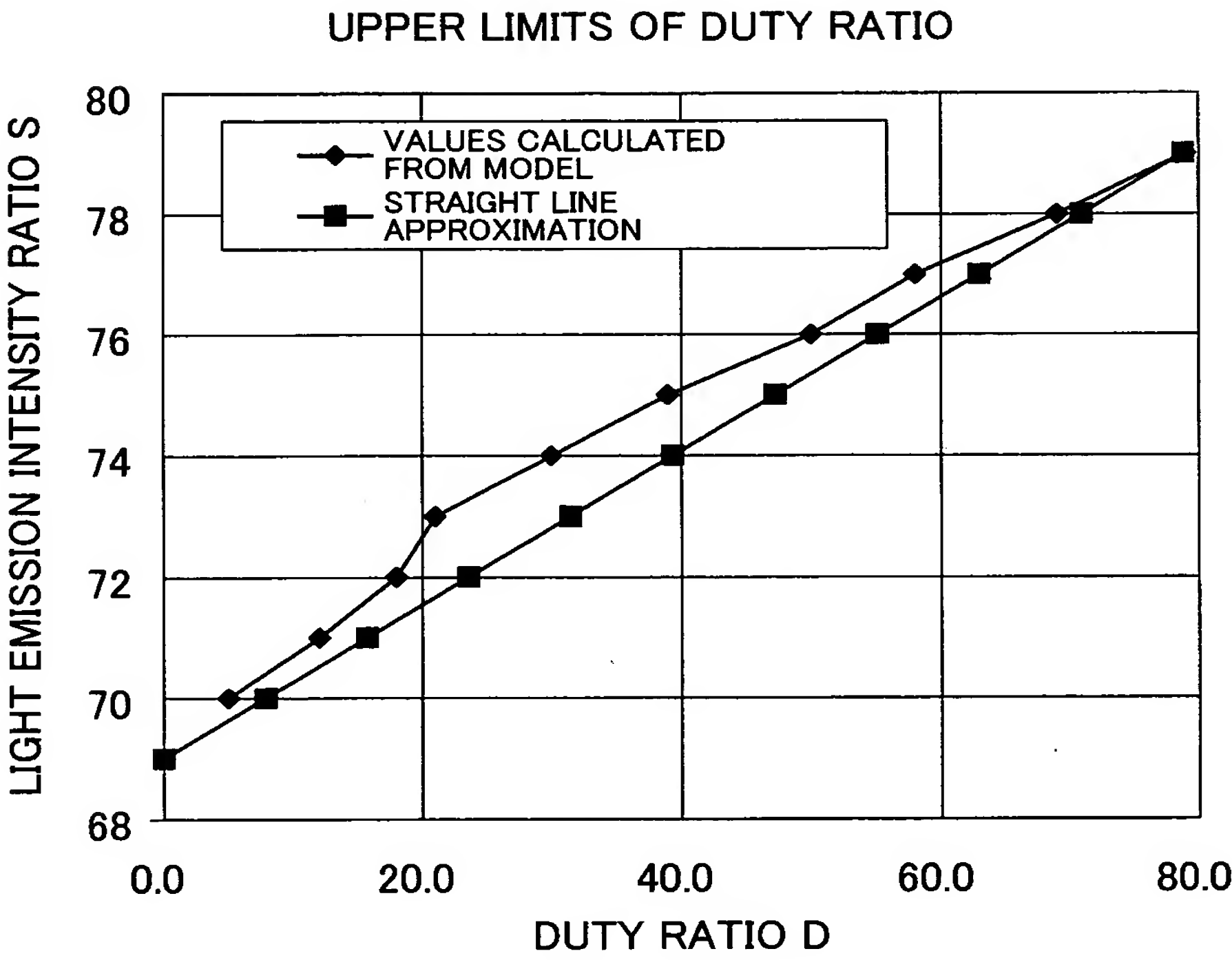


FIG. 23 (b)

LIGHT EMISSION INTENSITY RATIO S	DUTY RATIO D
70	5.0
71	12.0
72	18.0
73	21.0
74	30.0
75	39.0
76	50.0
77	58.0
78	69.0
79	78.9

VALUES CALCULATED FROM MODEL

FIG. 24

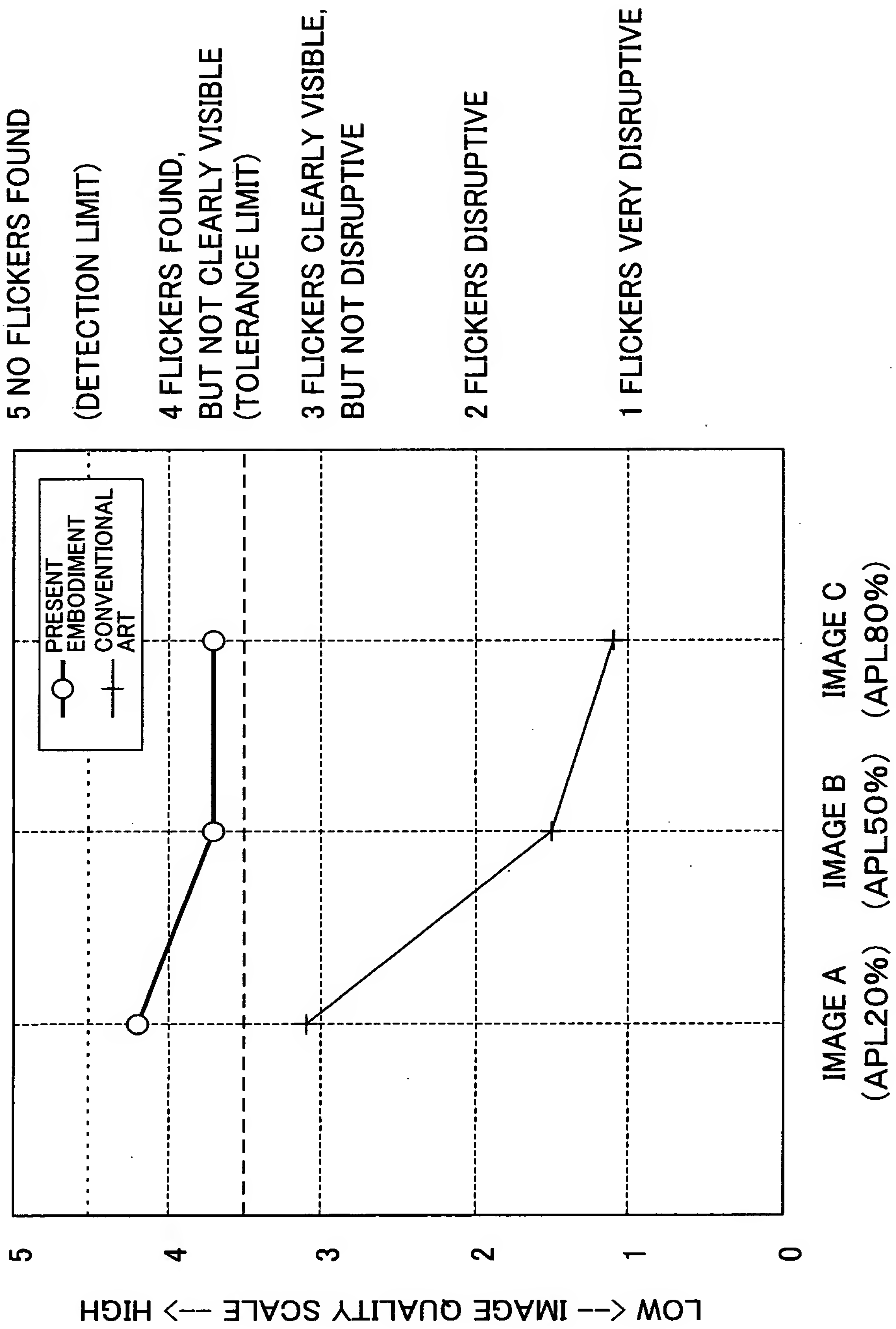


FIG. 25

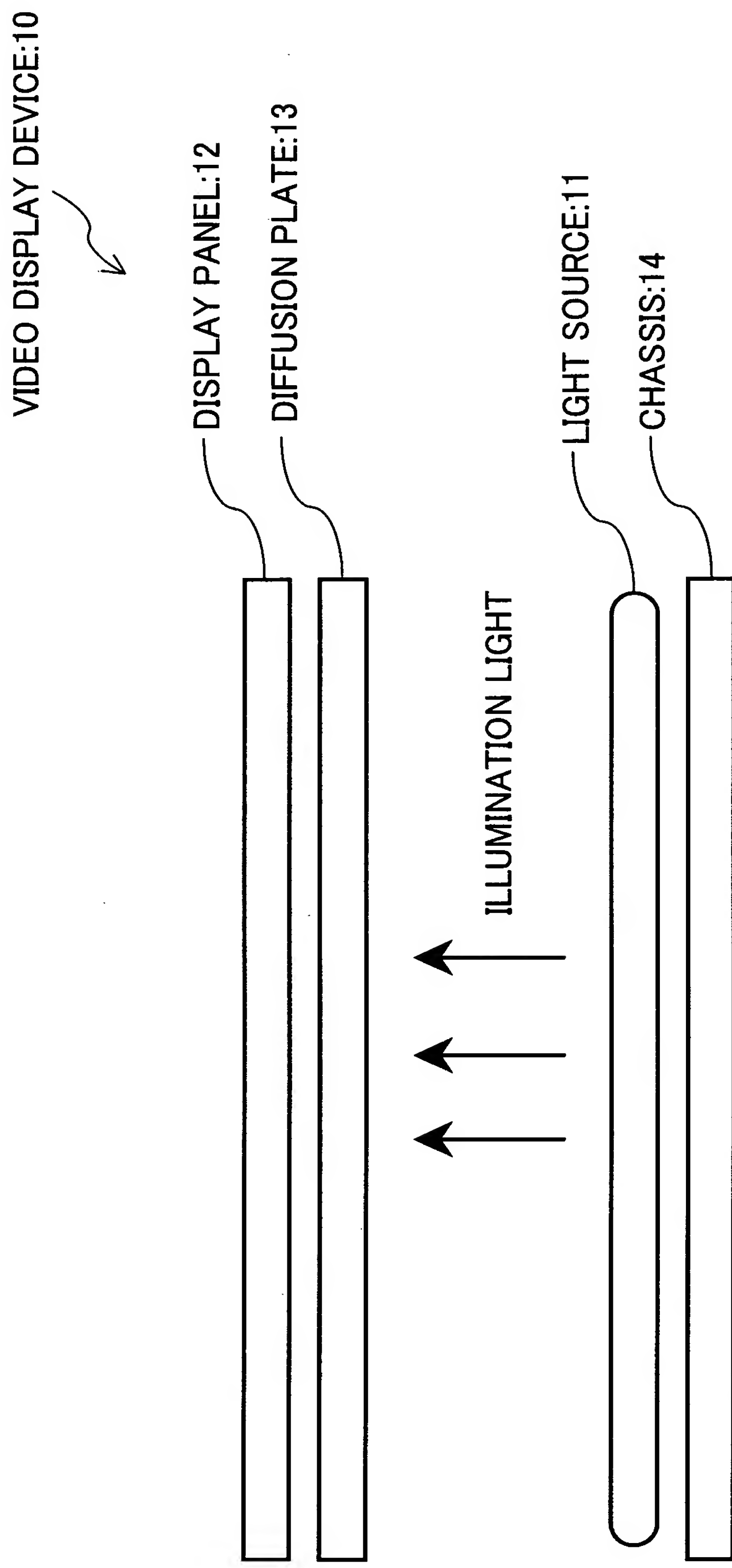


FIG. 26

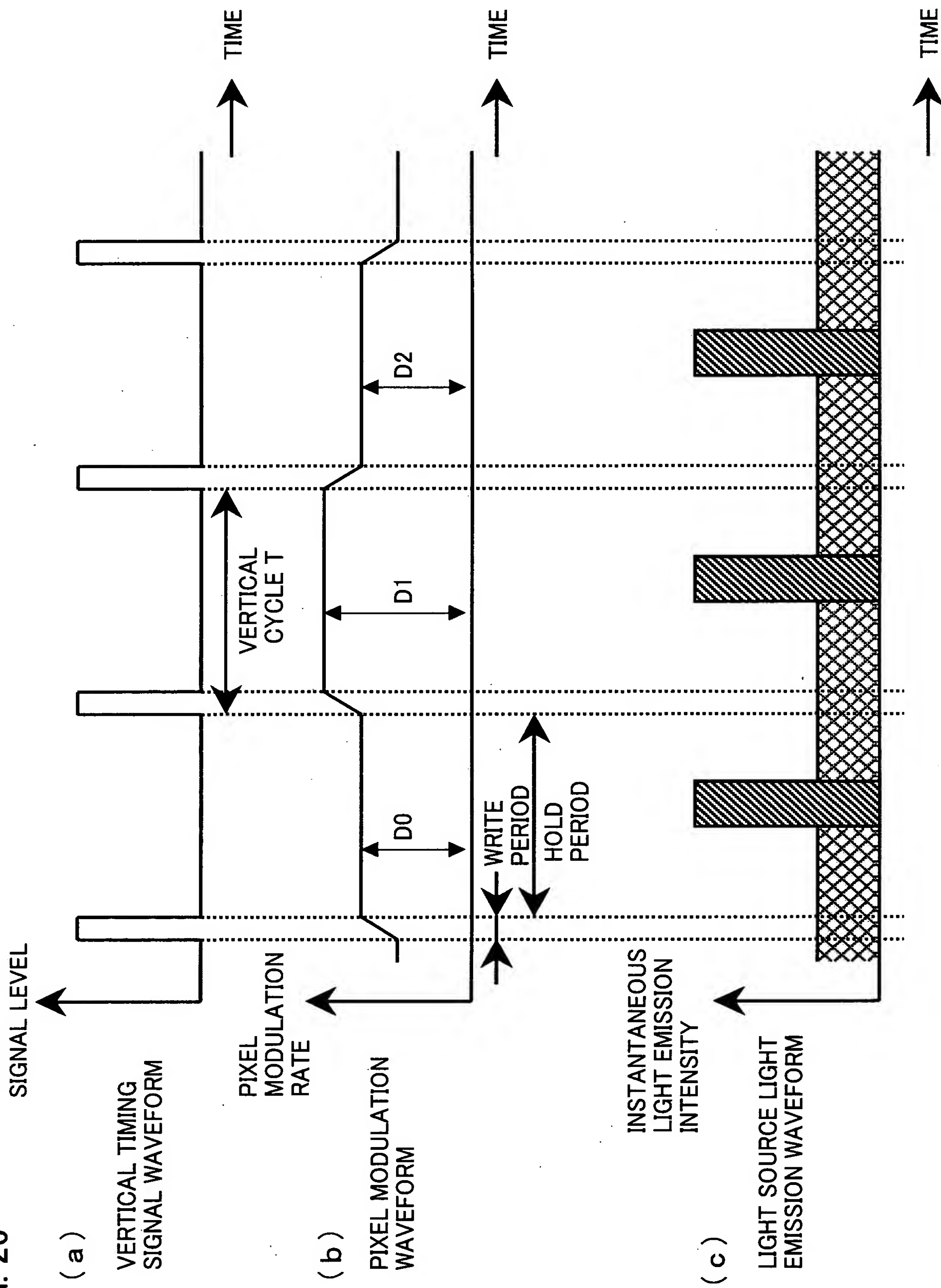
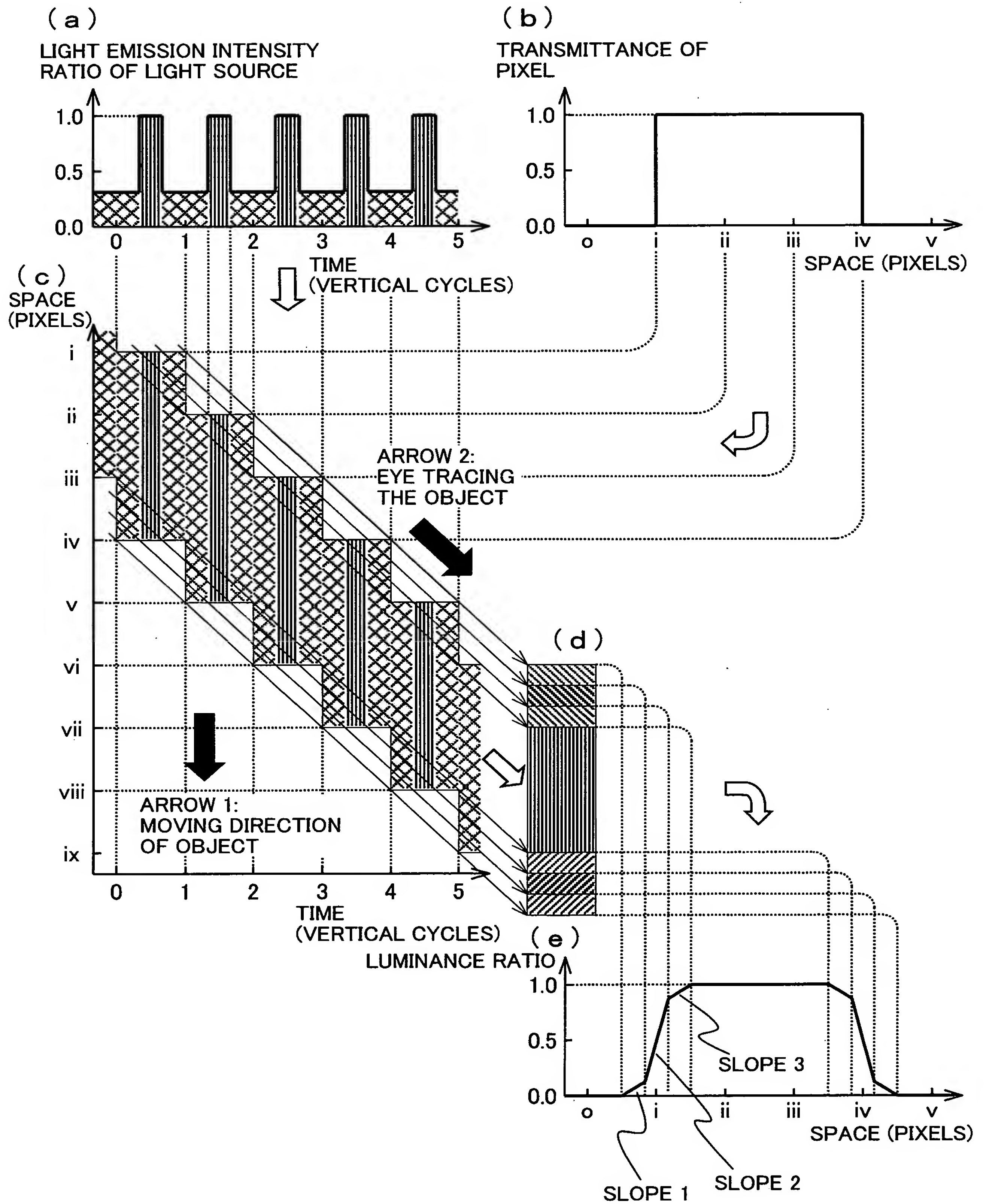


FIG. 27



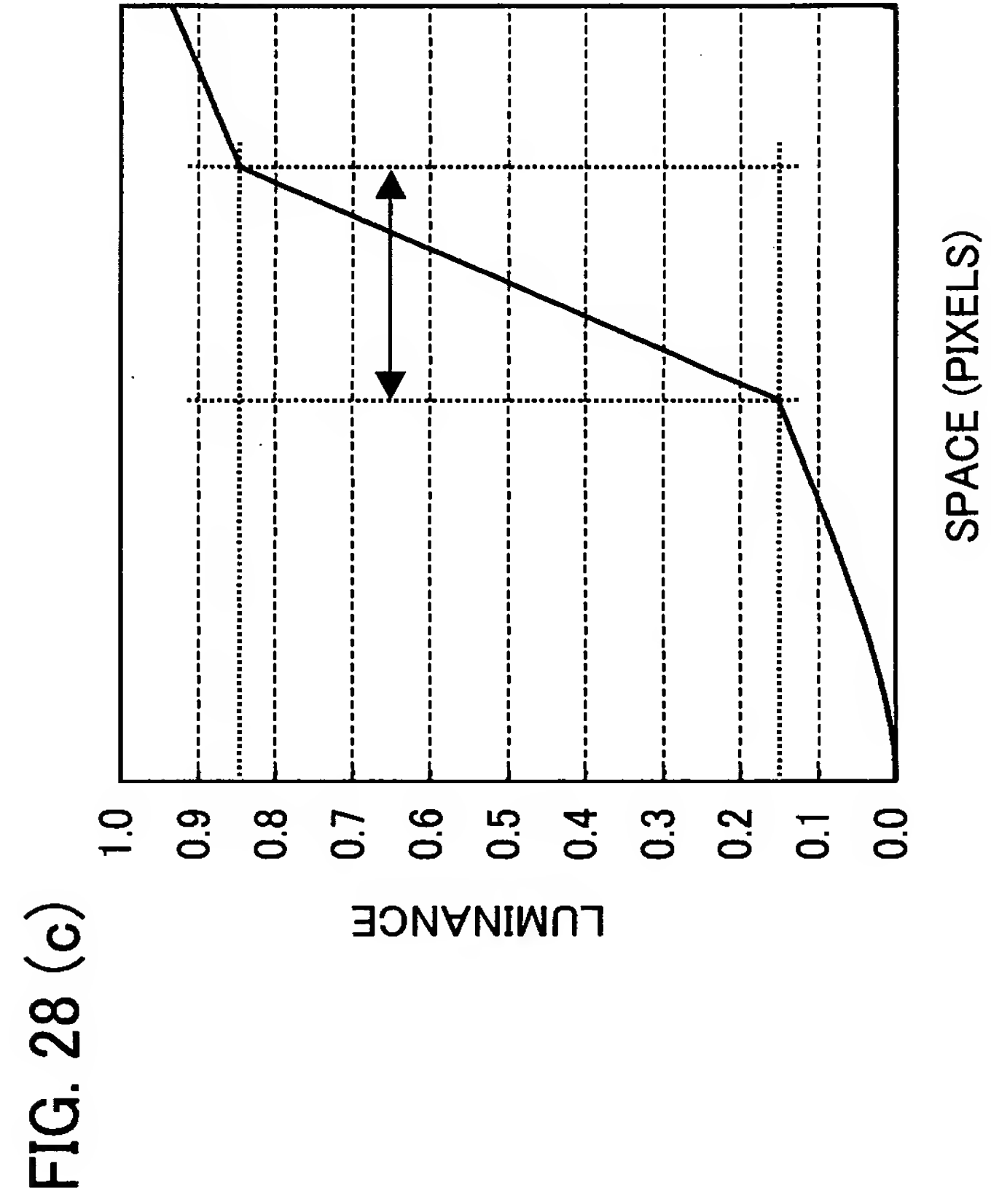
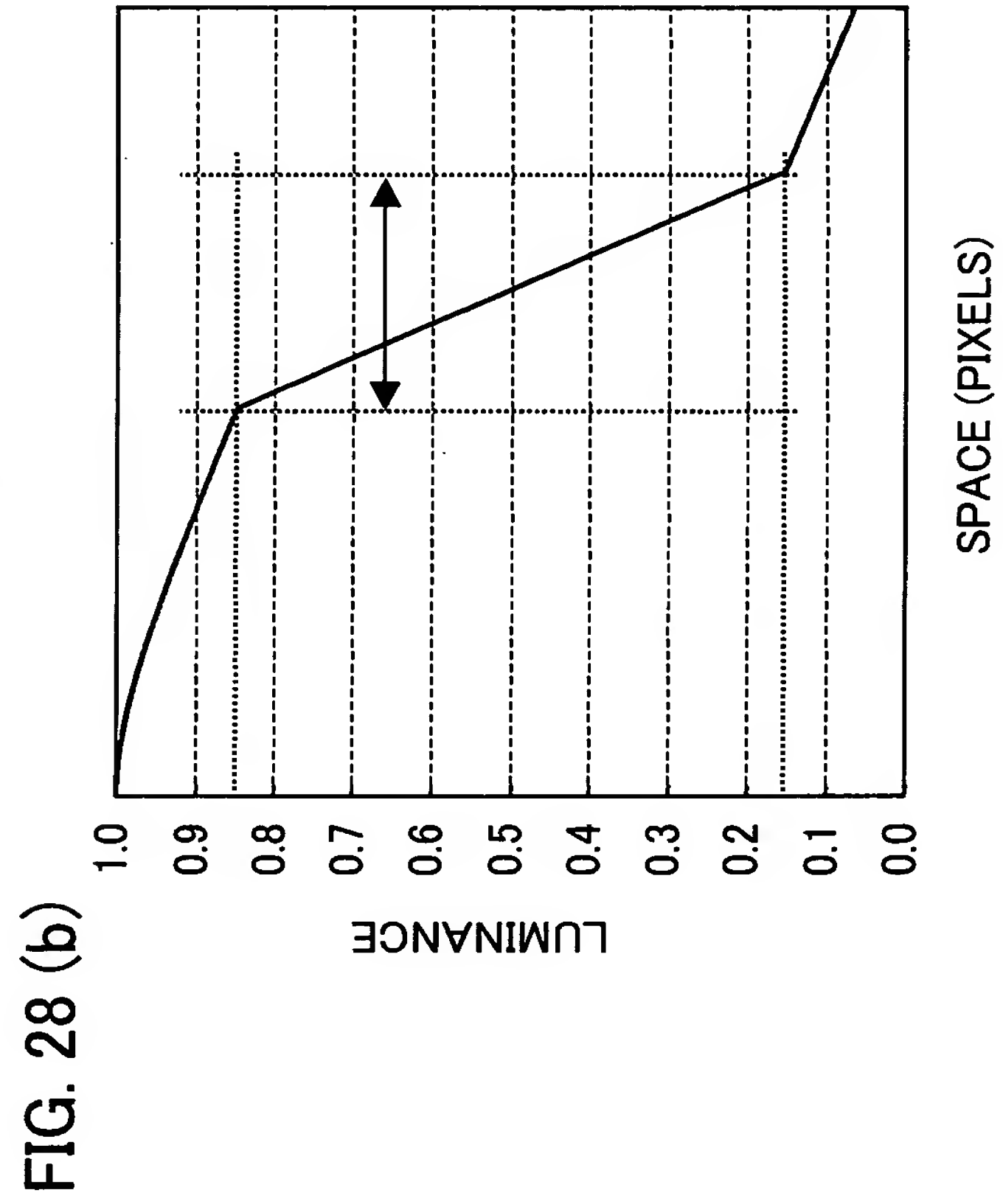
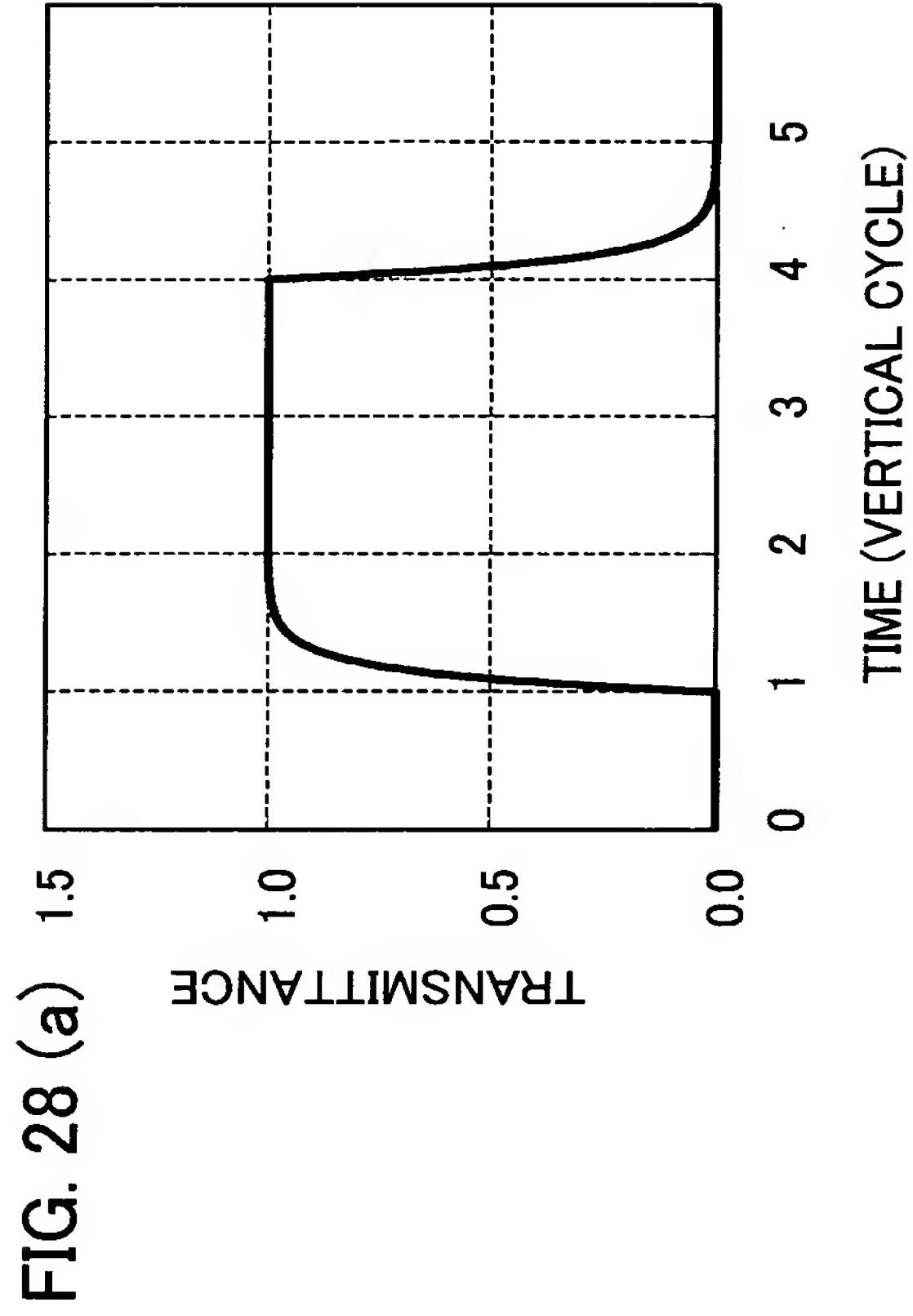


FIG. 29

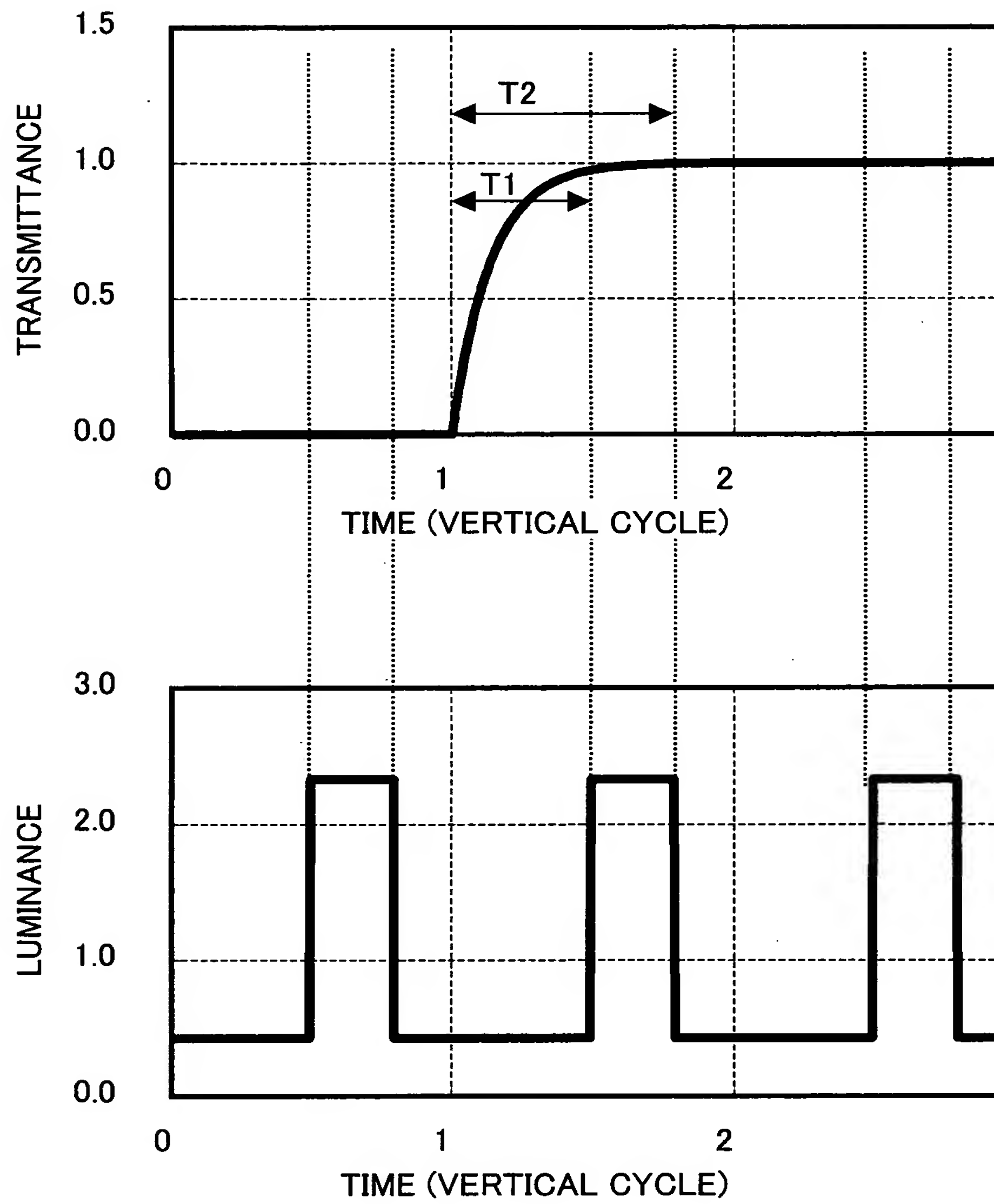


FIG. 30 (a)

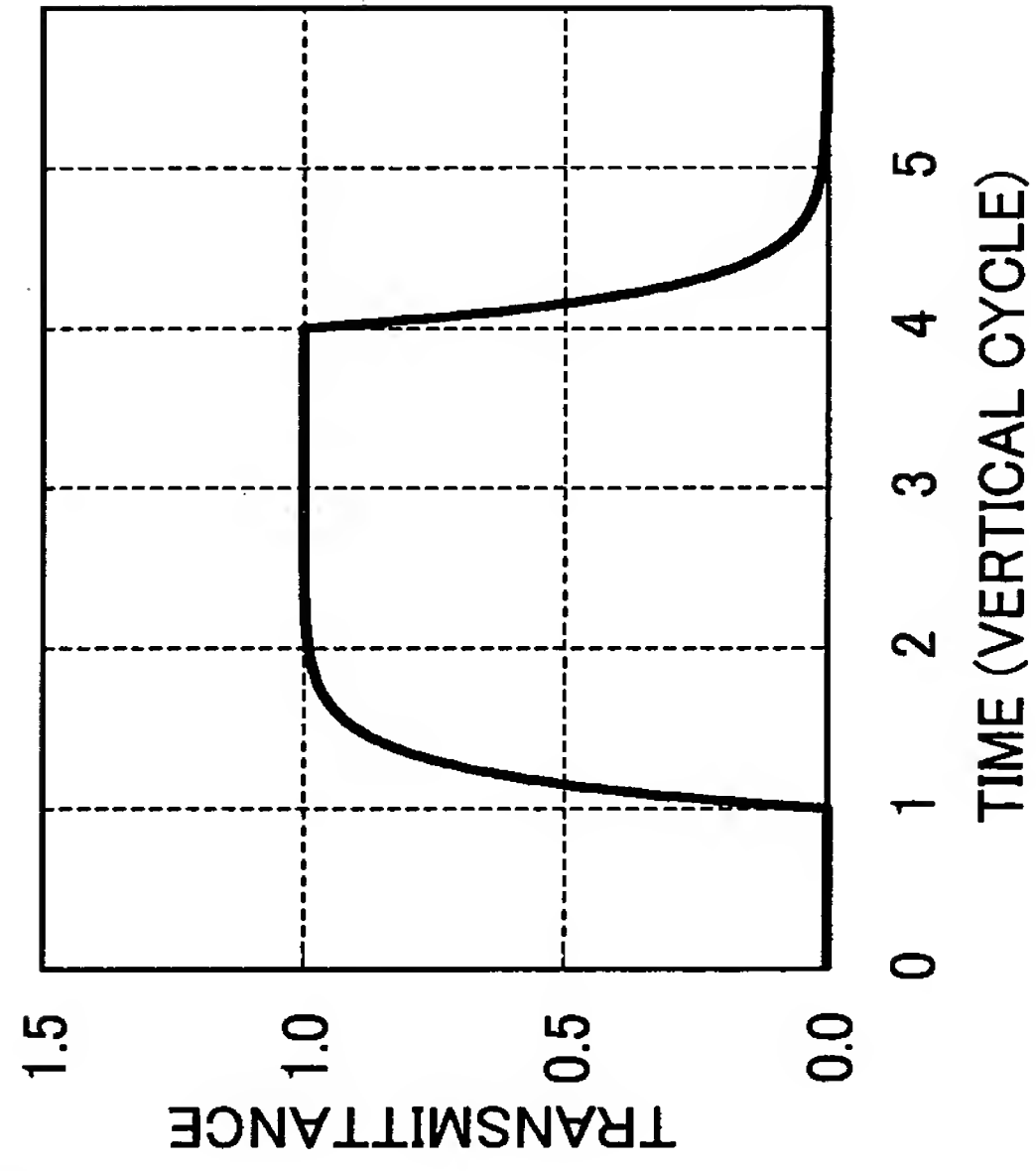


FIG. 30 (b)

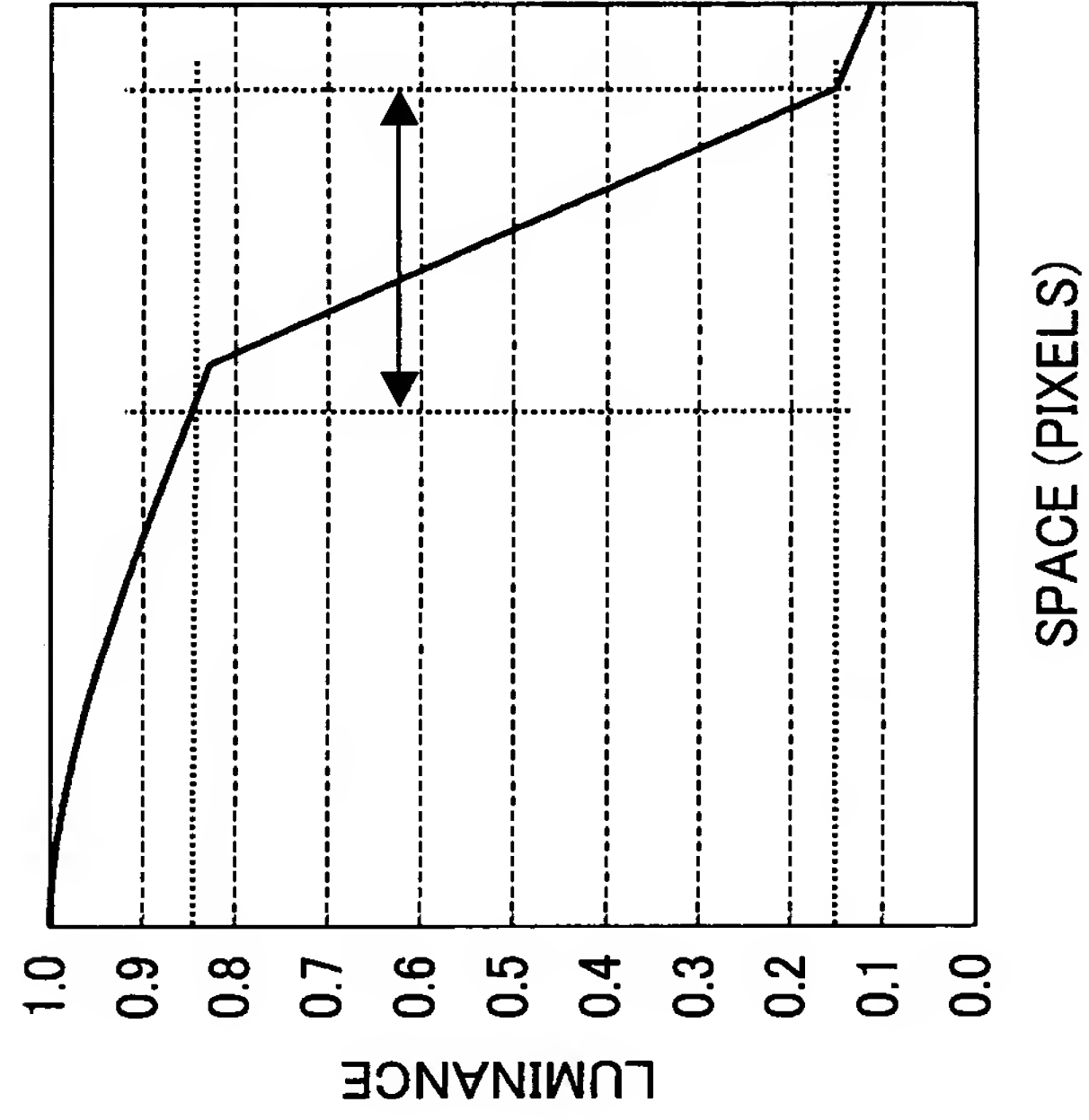


FIG. 30 (c)

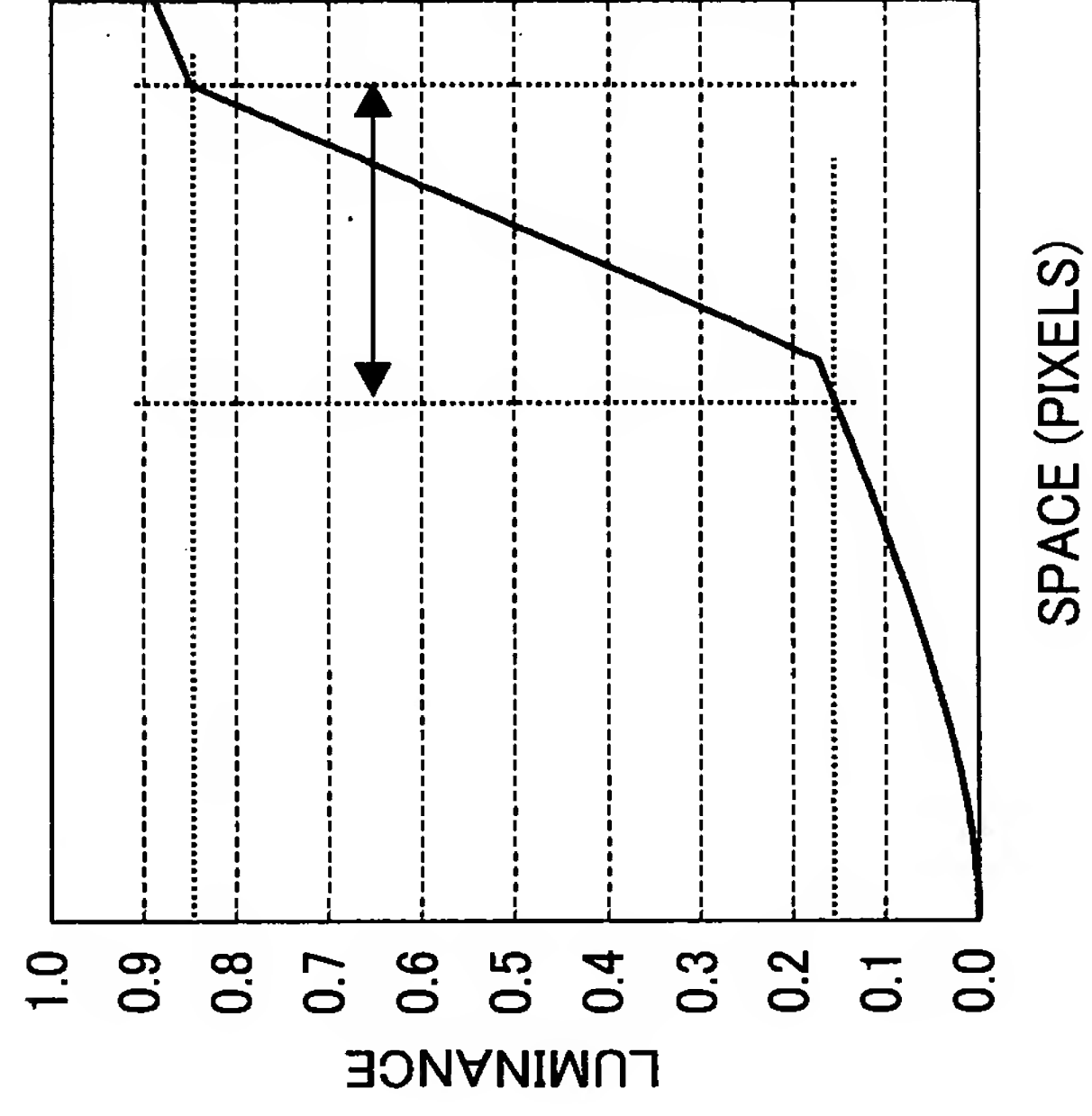


FIG. 31

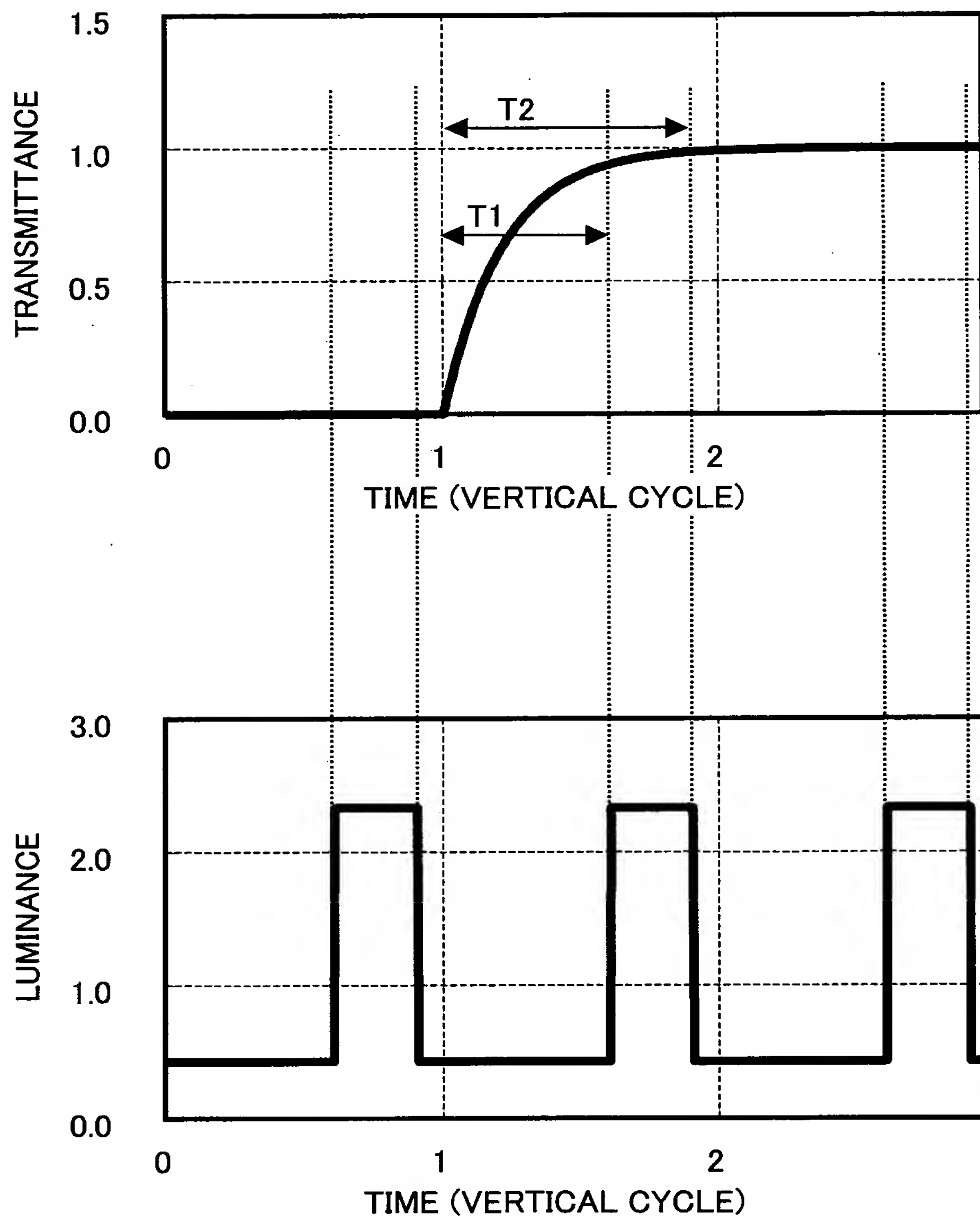


FIG. 32

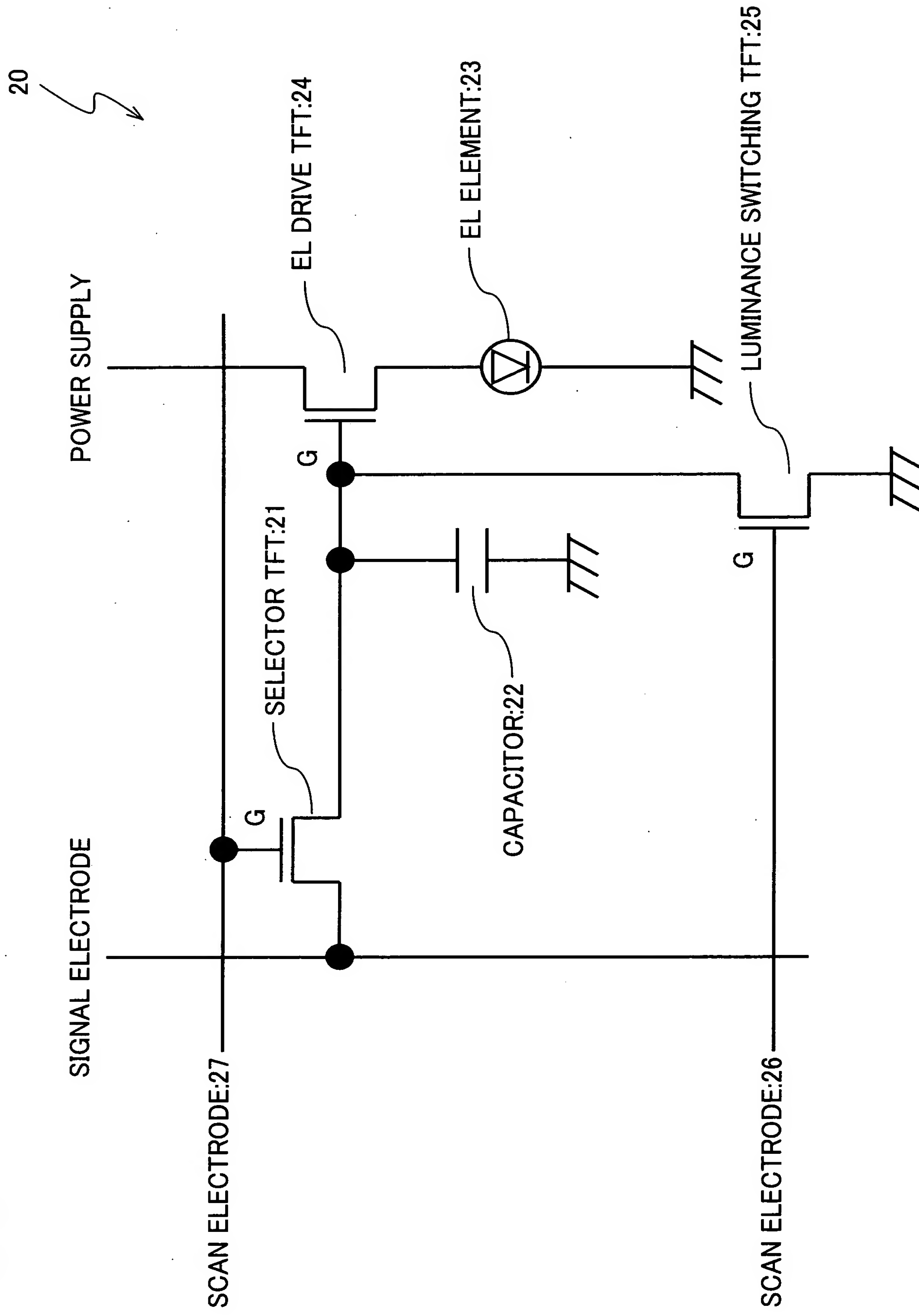


FIG. 33

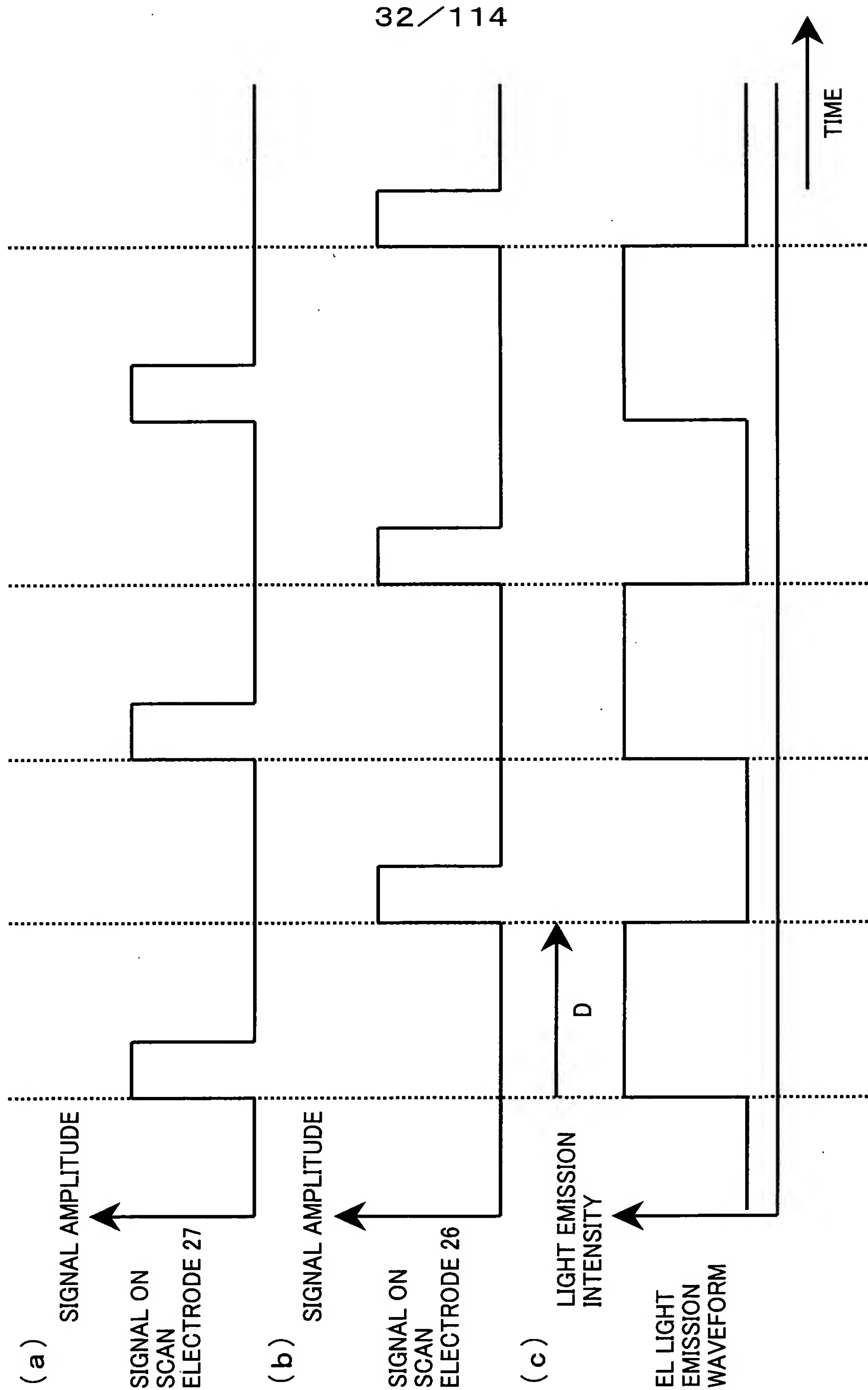


FIG. 34

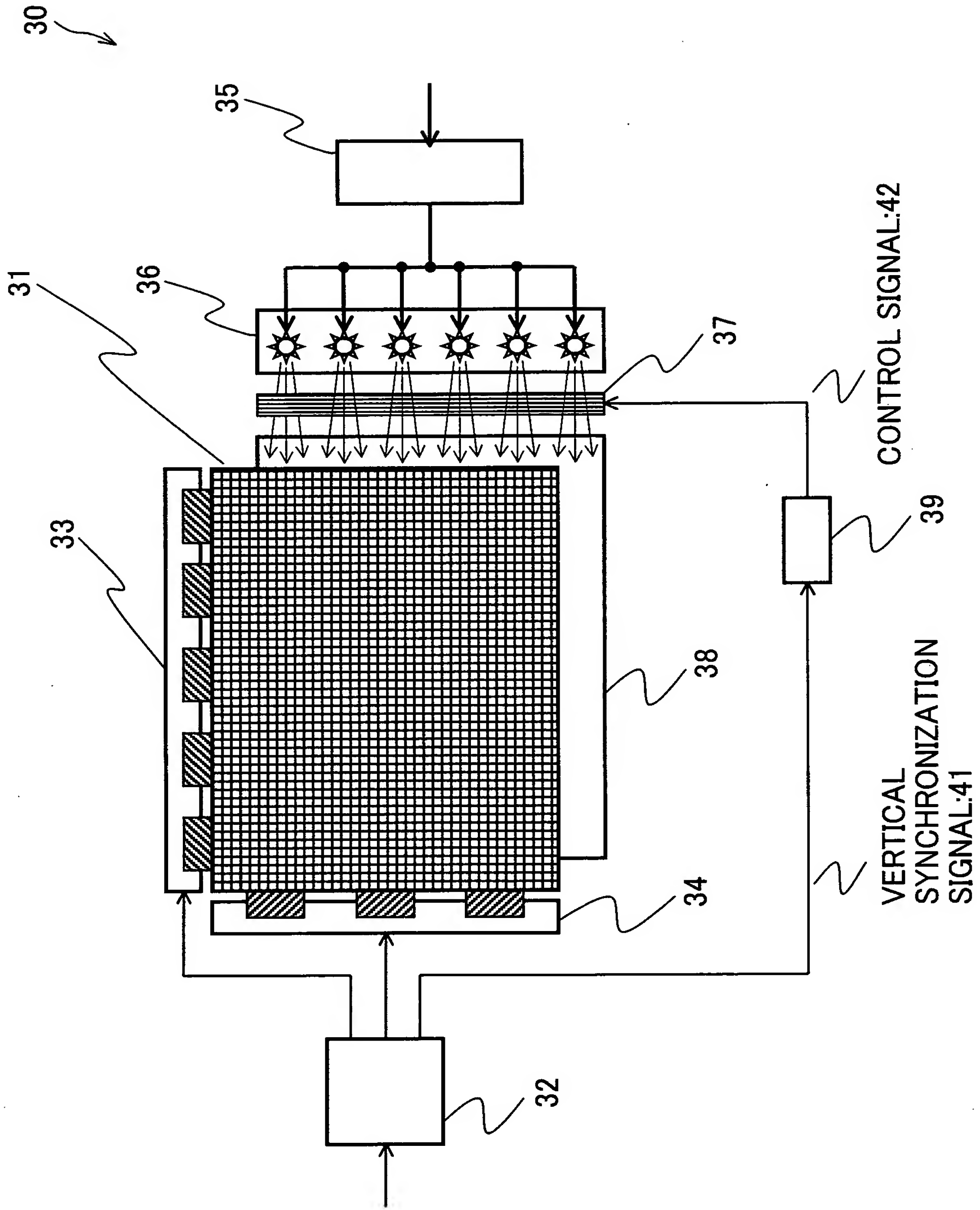


FIG. 35

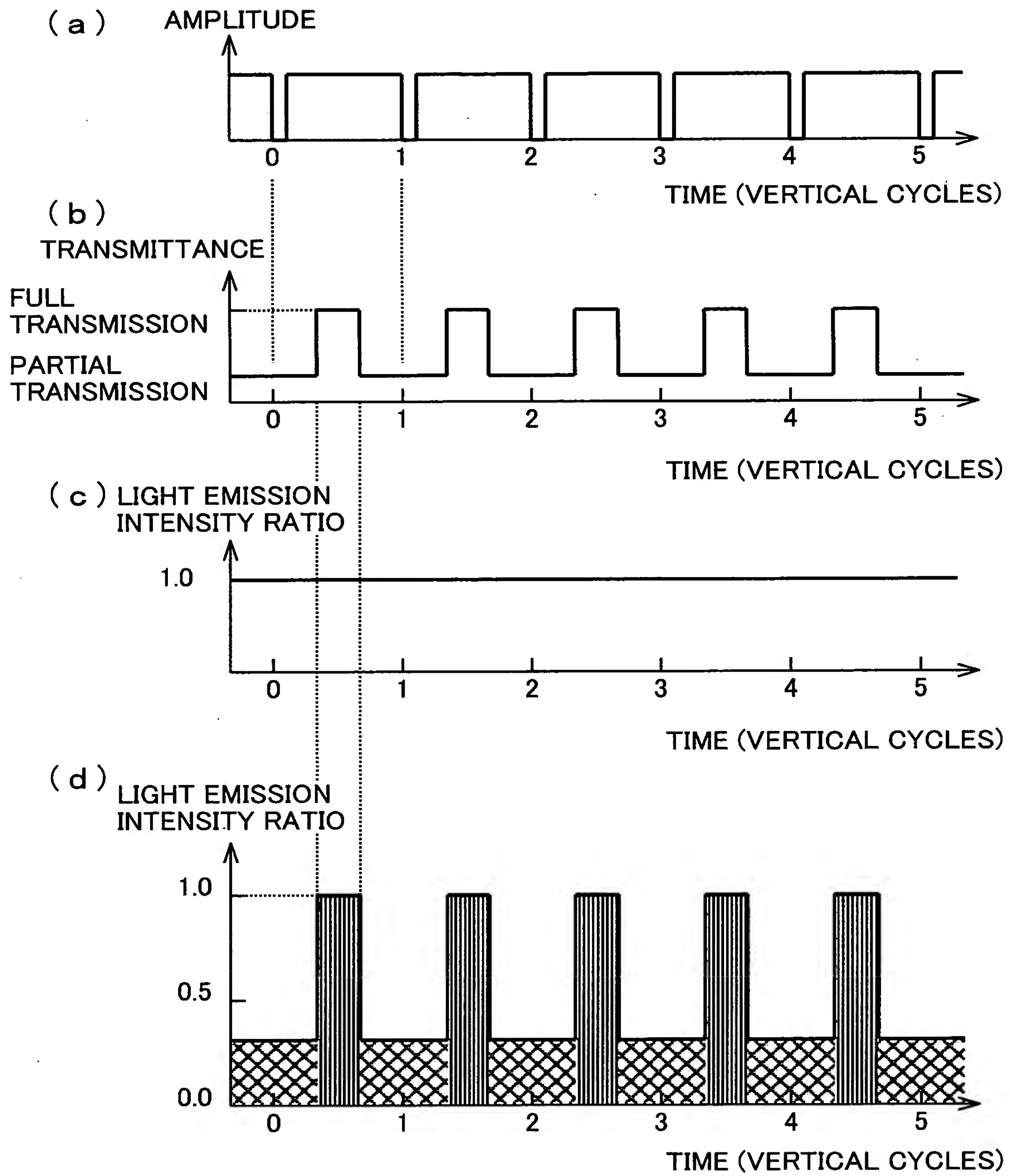


FIG. 36

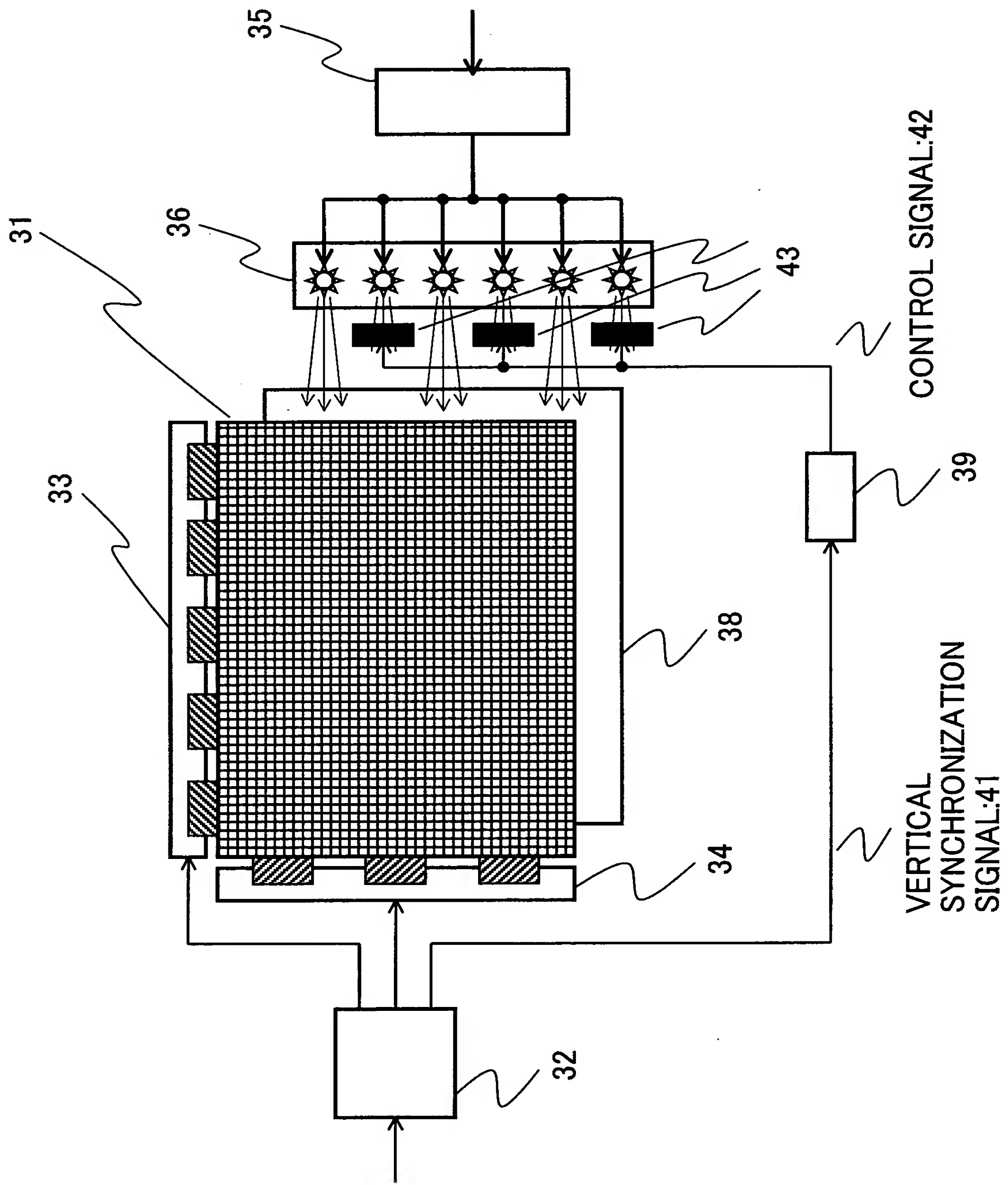


FIG. 37

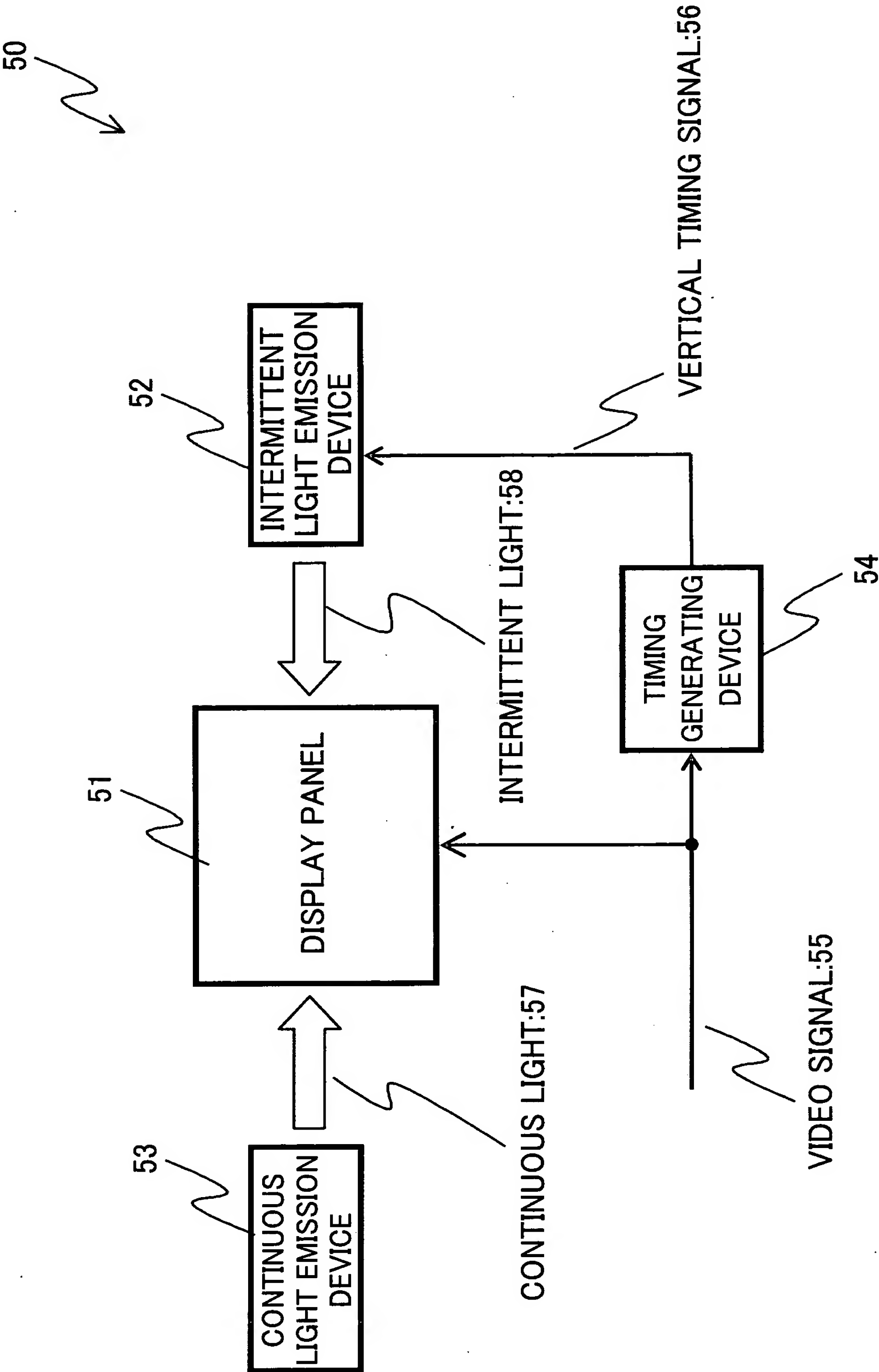


FIG. 38

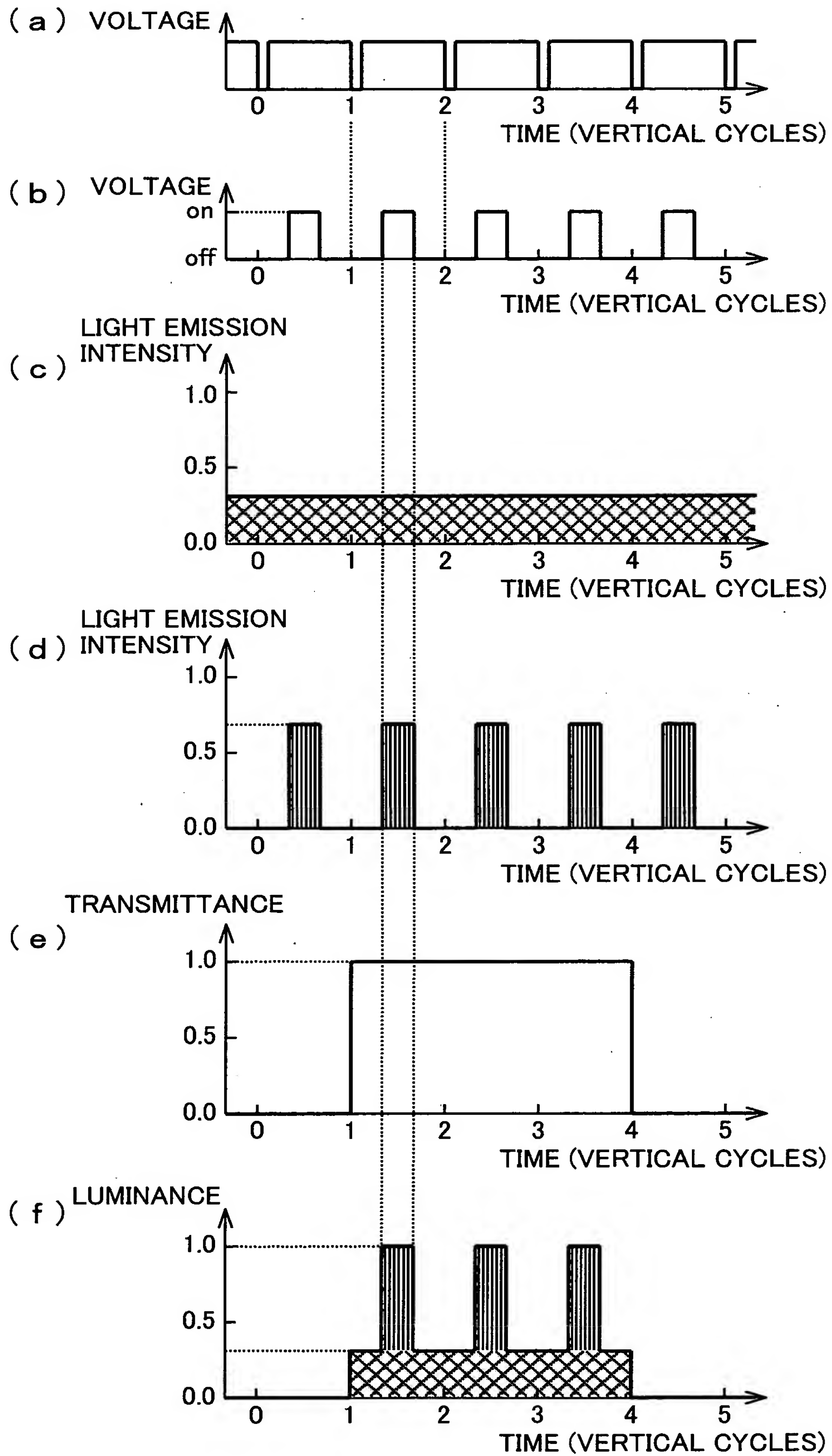


FIG. 39 (a)

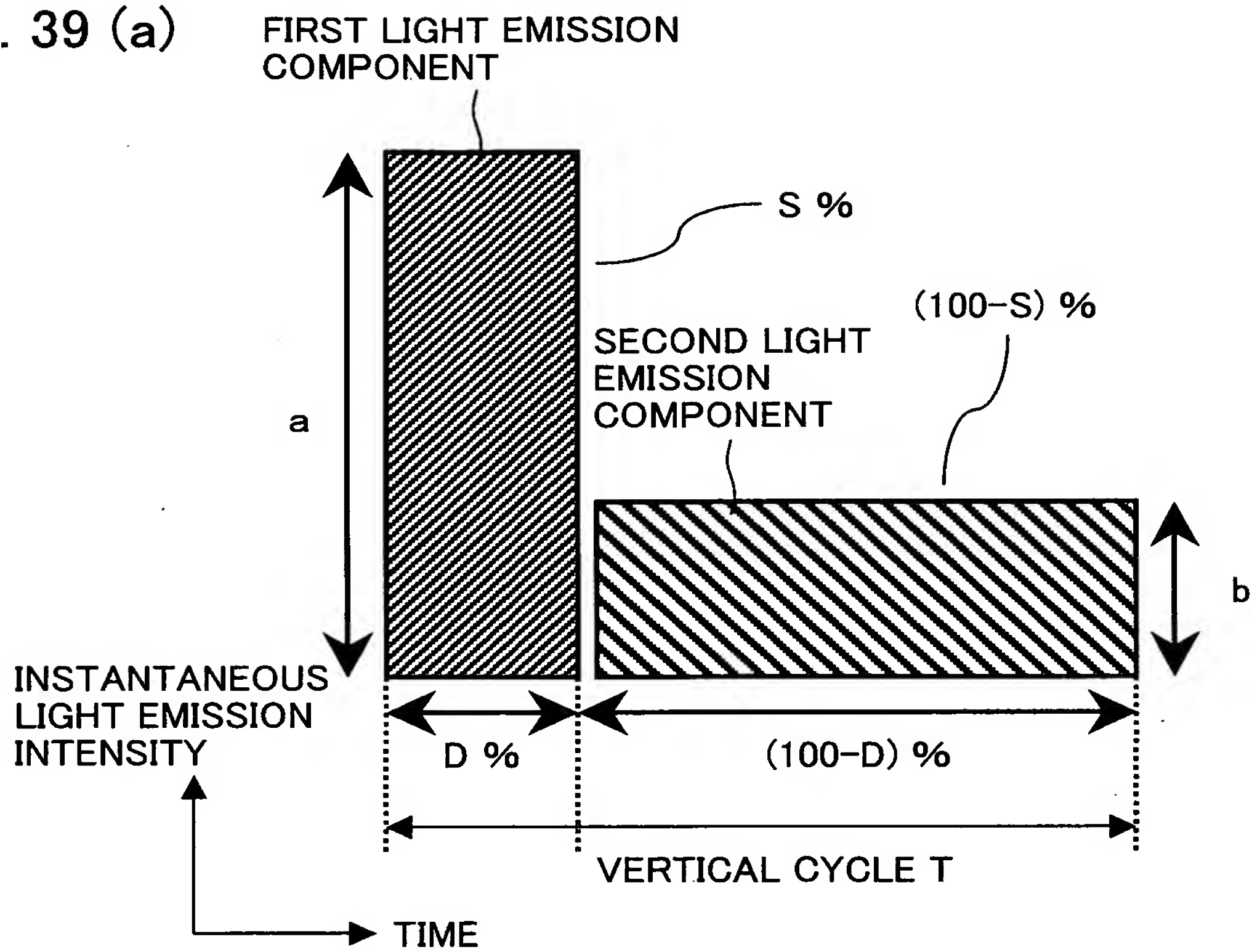


FIG. 39 (b)

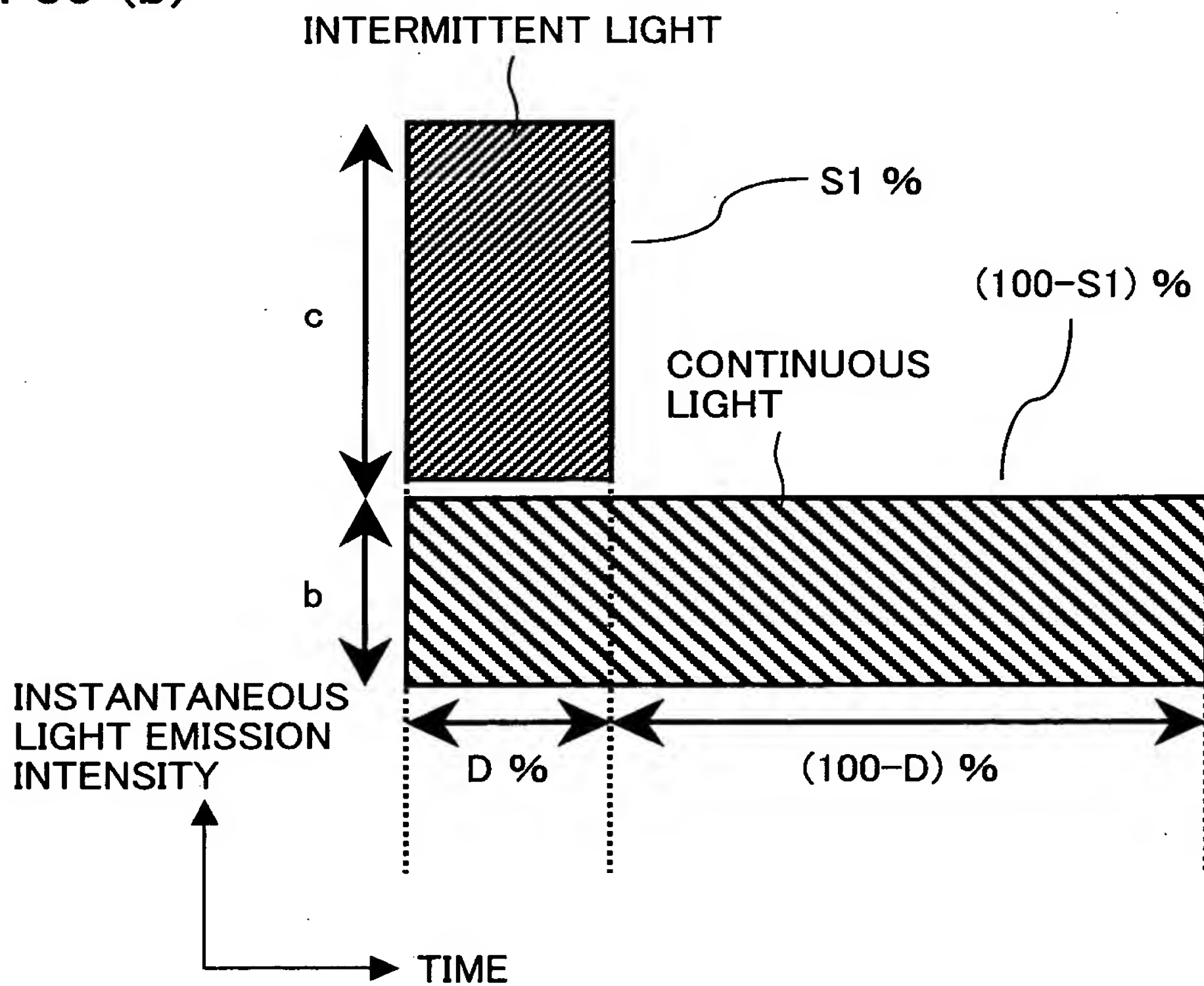


FIG. 40

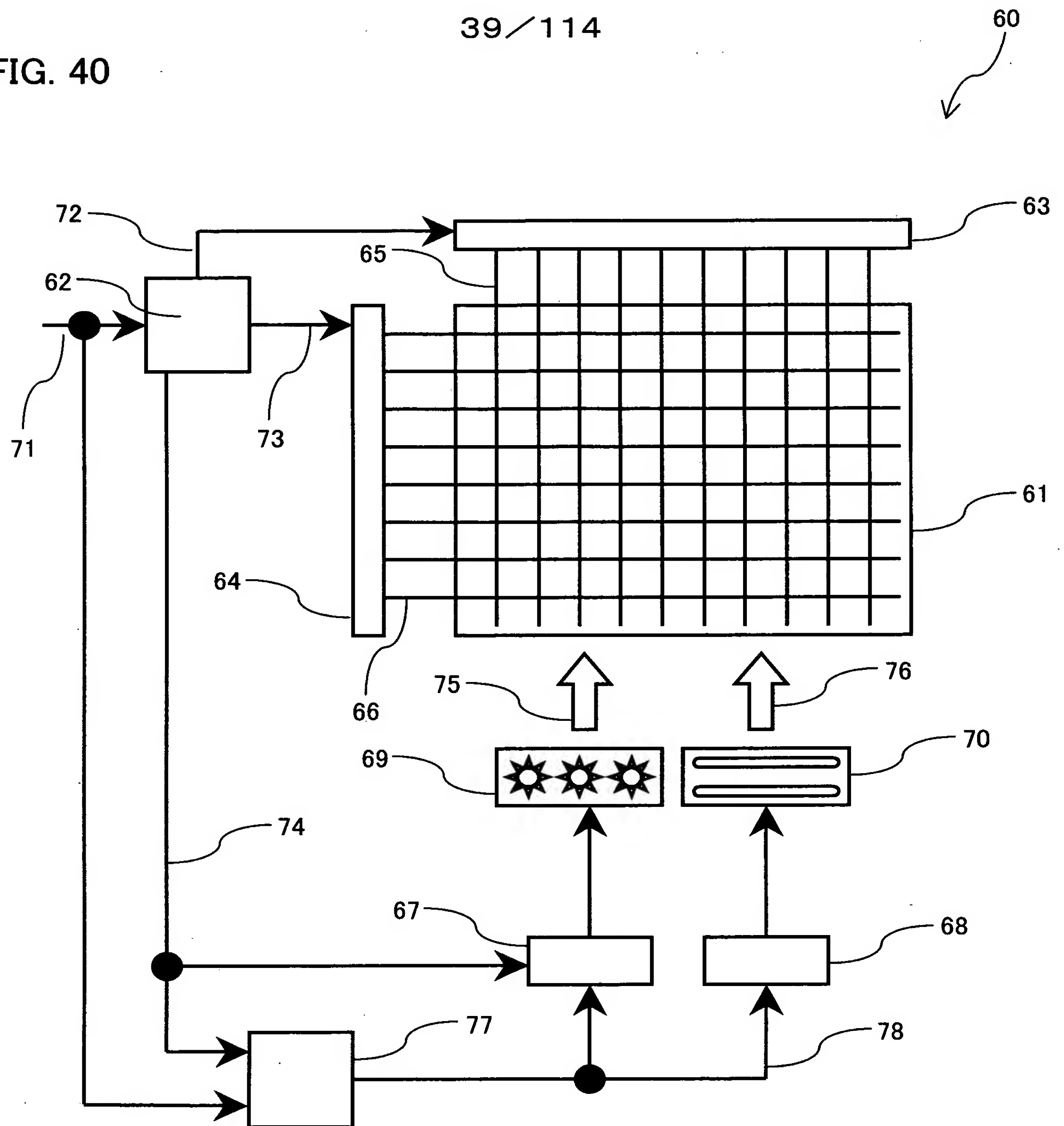


FIG. 41

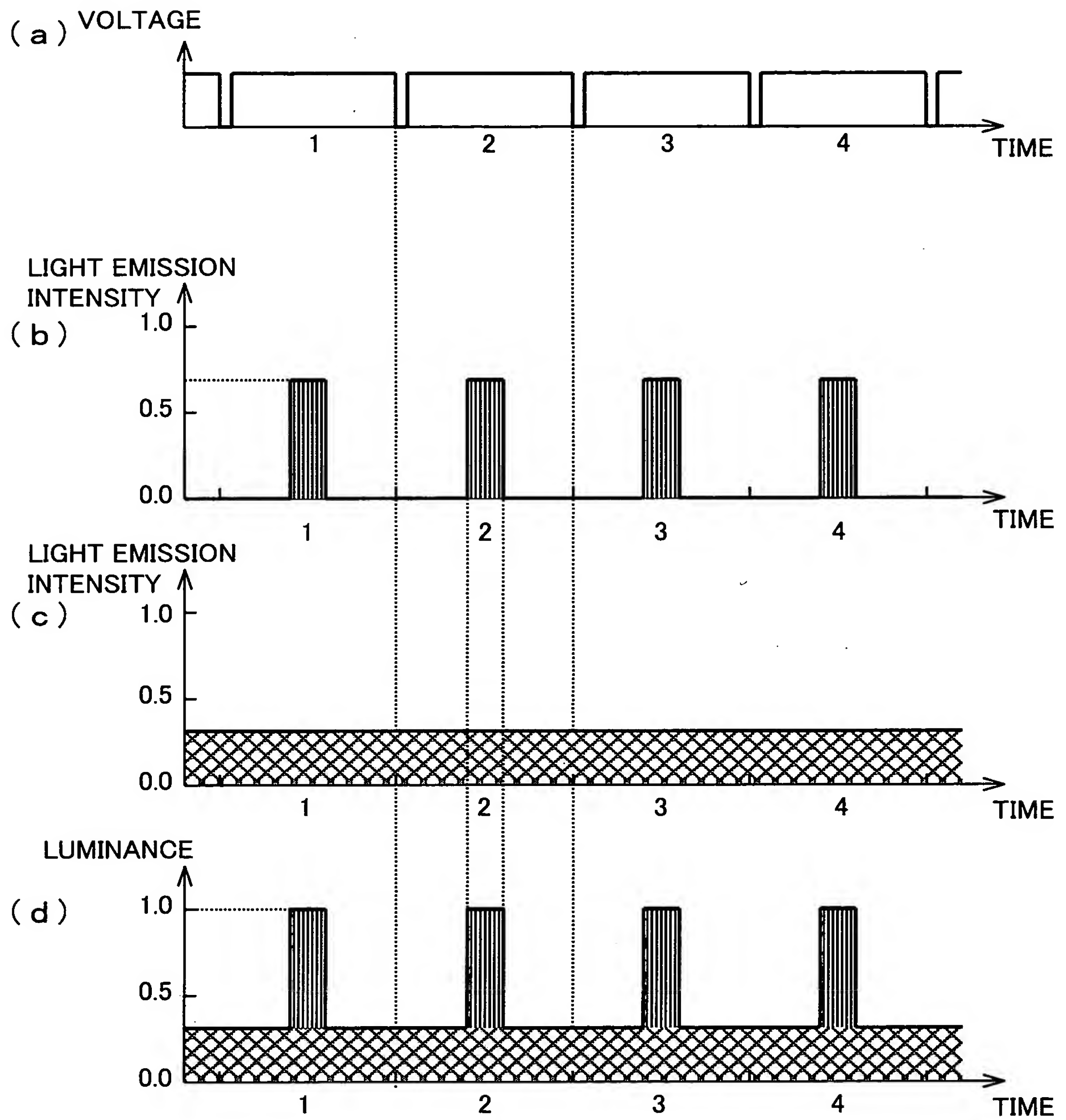


FIG. 42 (a)

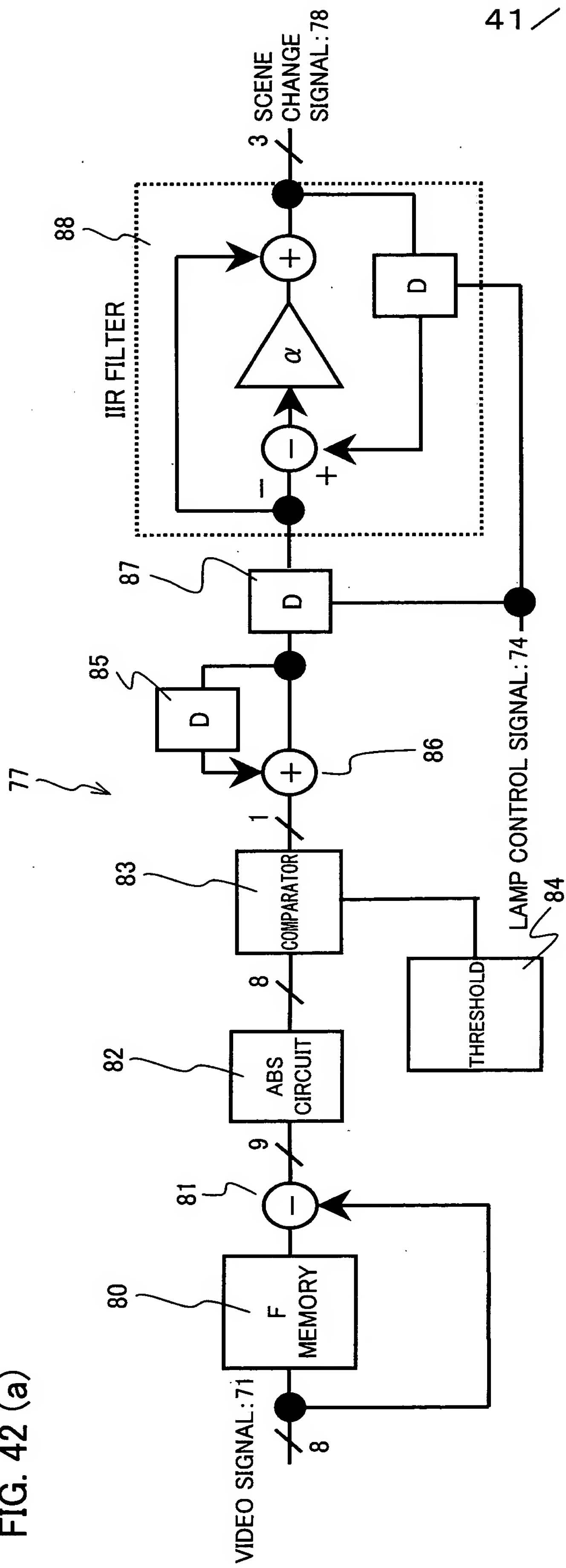


FIG. 42 (b)

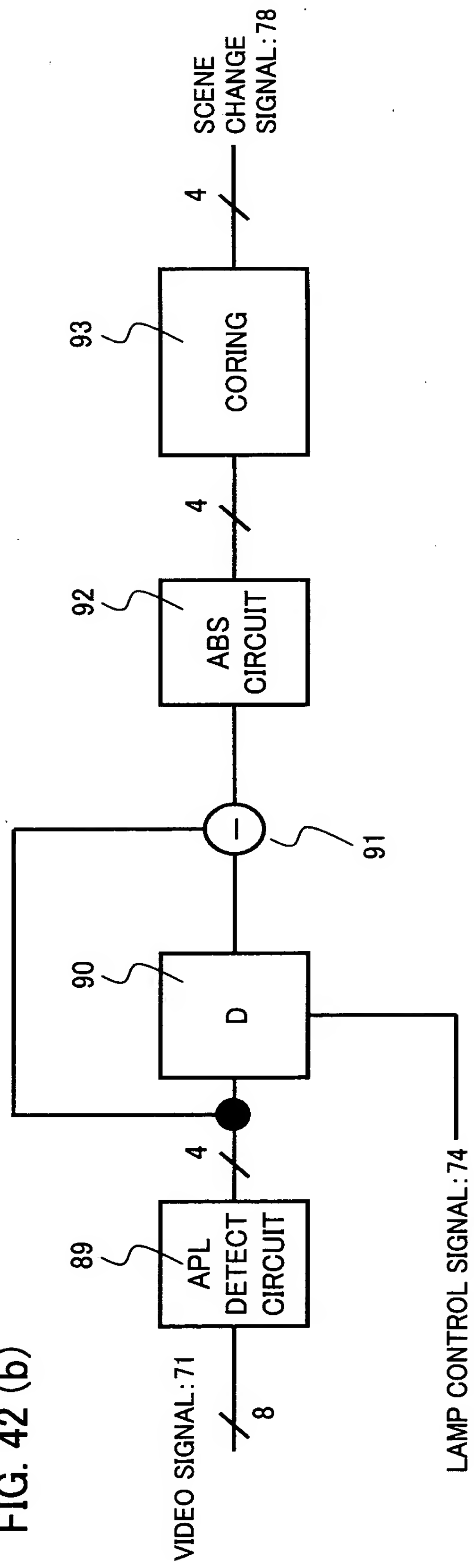


FIG. 43

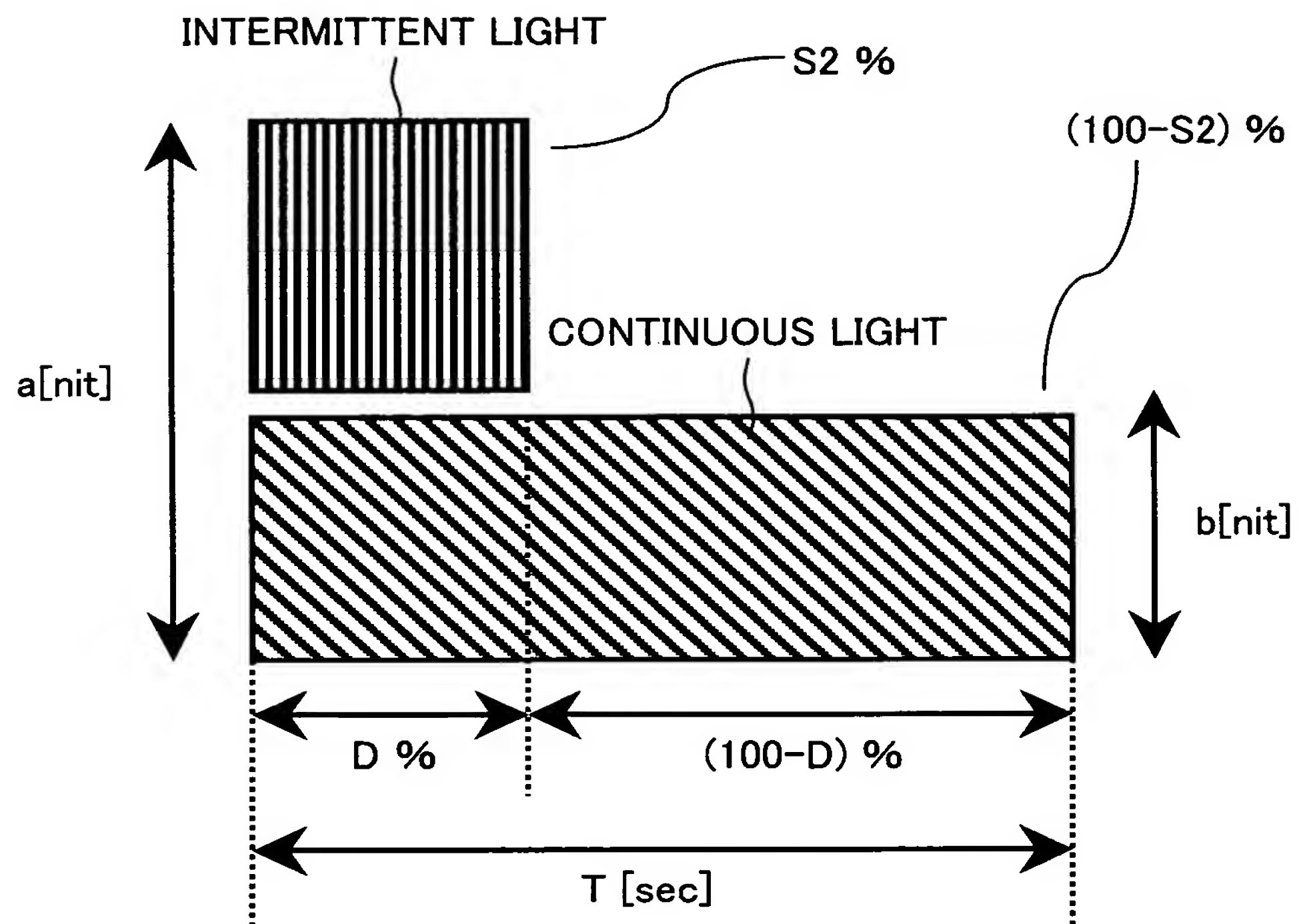


FIG. 44 (a)

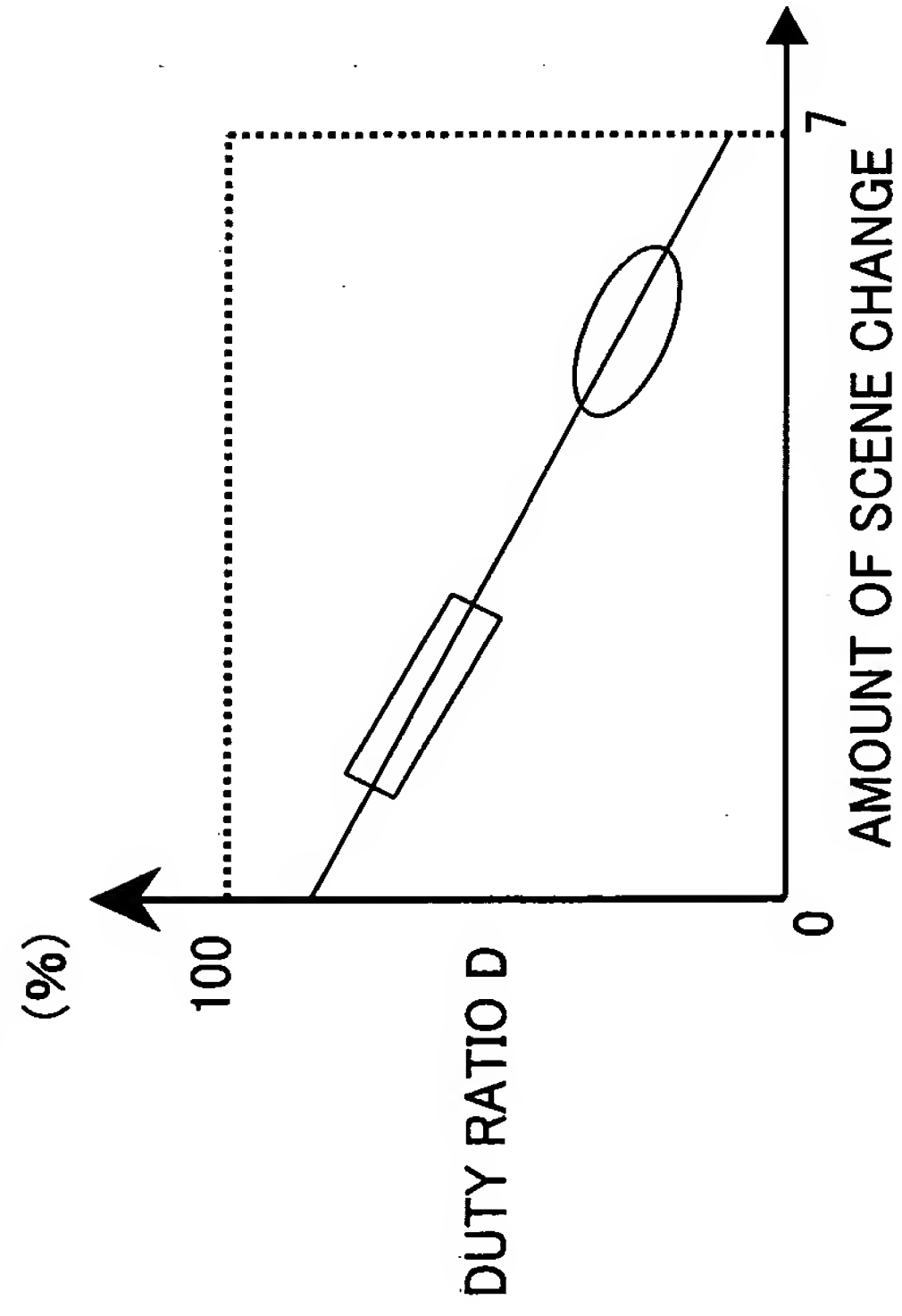


FIG. 44 (c)

DUTY RATIO D	AMOUNT OF FLICKERING	AMOUNT OF TRAILING
10	78.38	8.5
20	74.82	16.7
30	68.65	24.4
40	60.41	31.8
50	50.93	38.9
60	40.59	45.7
70	29.51	52.1

S2 FIXED AT 80%

FIG. 44 (b)

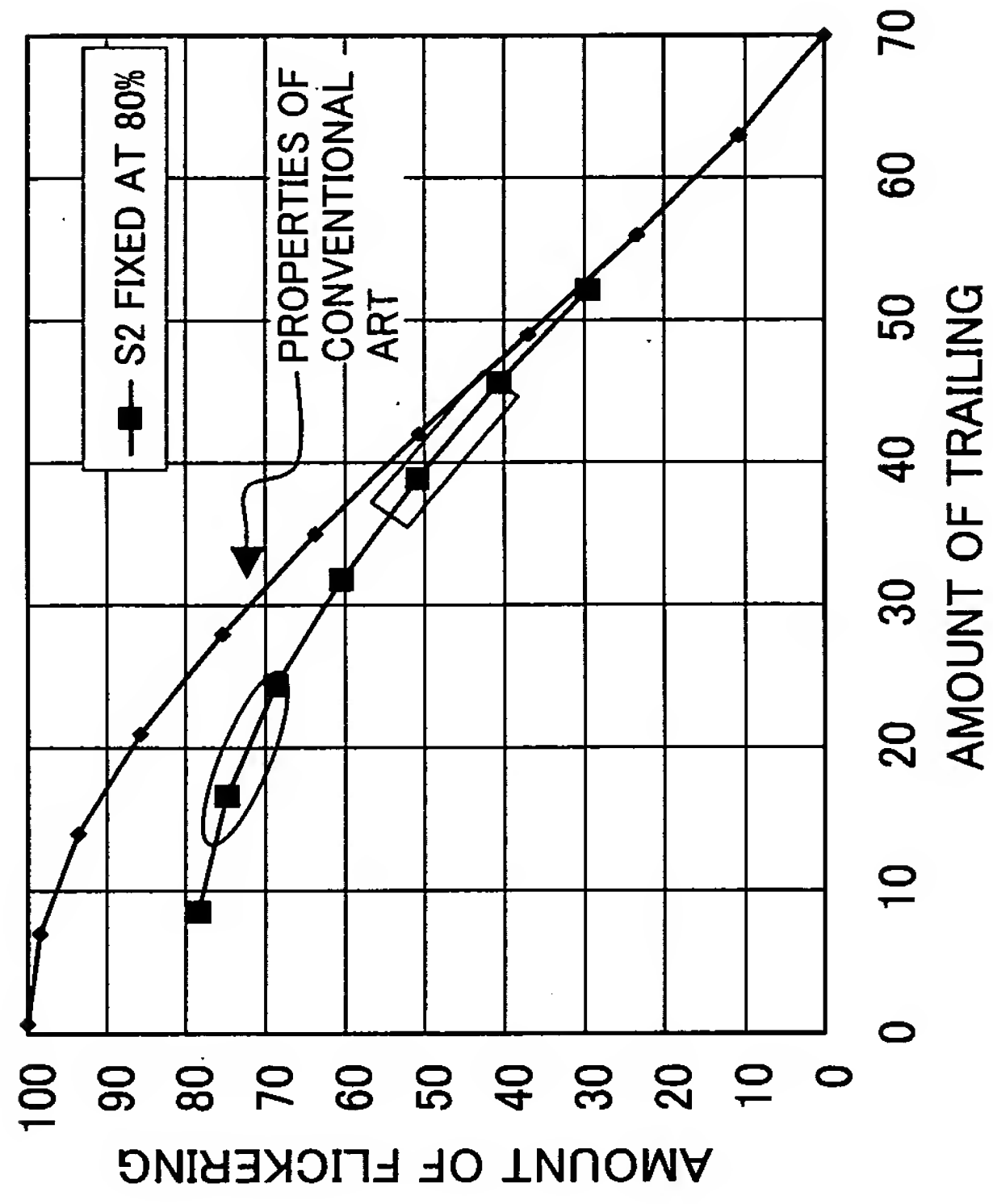


FIG. 45 (a)

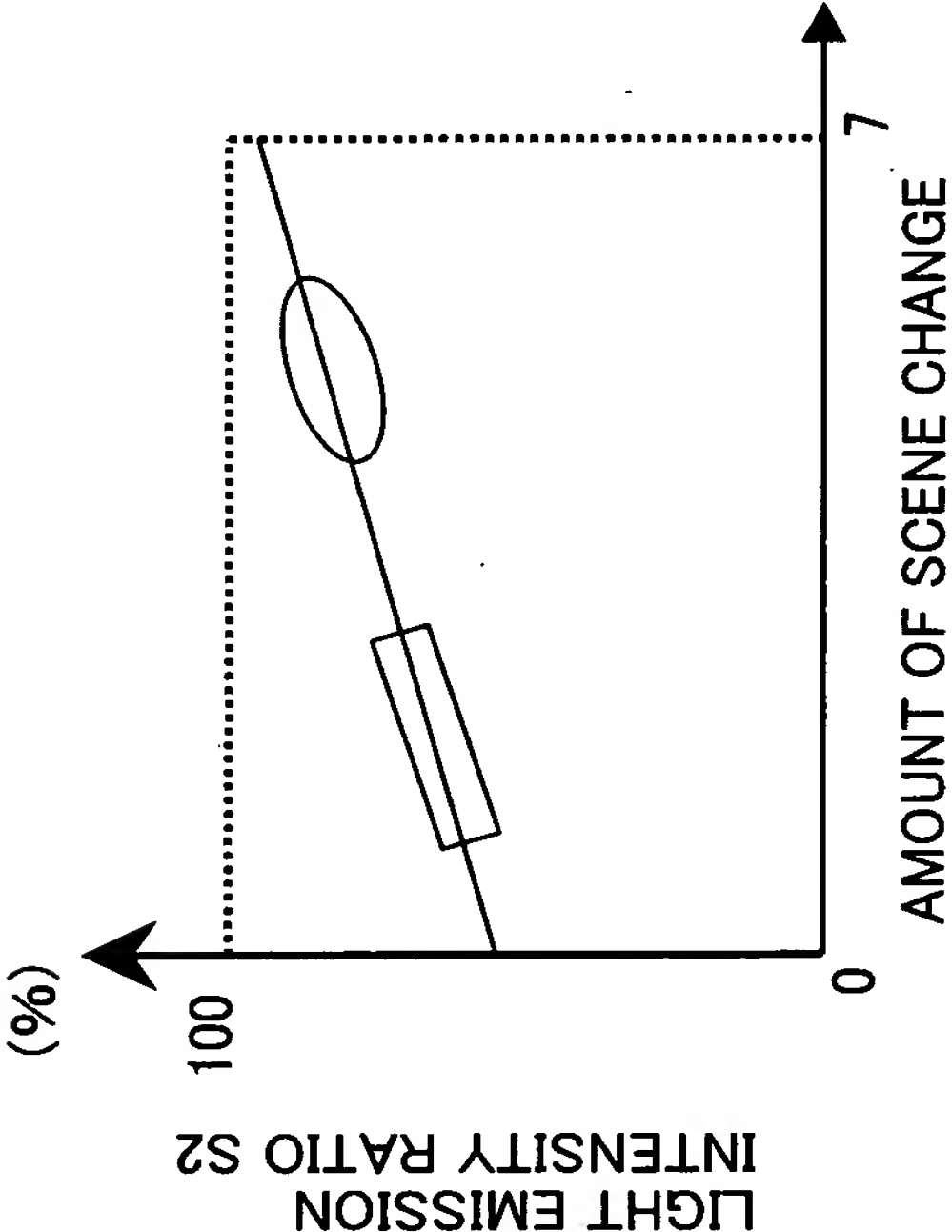


FIG. 45 (c)

LIGHT EMISSION INTENSITY RATIO S2	AMOUNT OF FLICKERING	AMOUNT OF TRAILING
95	88.9	14.6
90	84.2	15.2
85	79.5	15.9
80	74.8	16.7
75	70.1	17.5
70	65.4	18.4

D FIXED AT 20%

FIG. 45 (b)

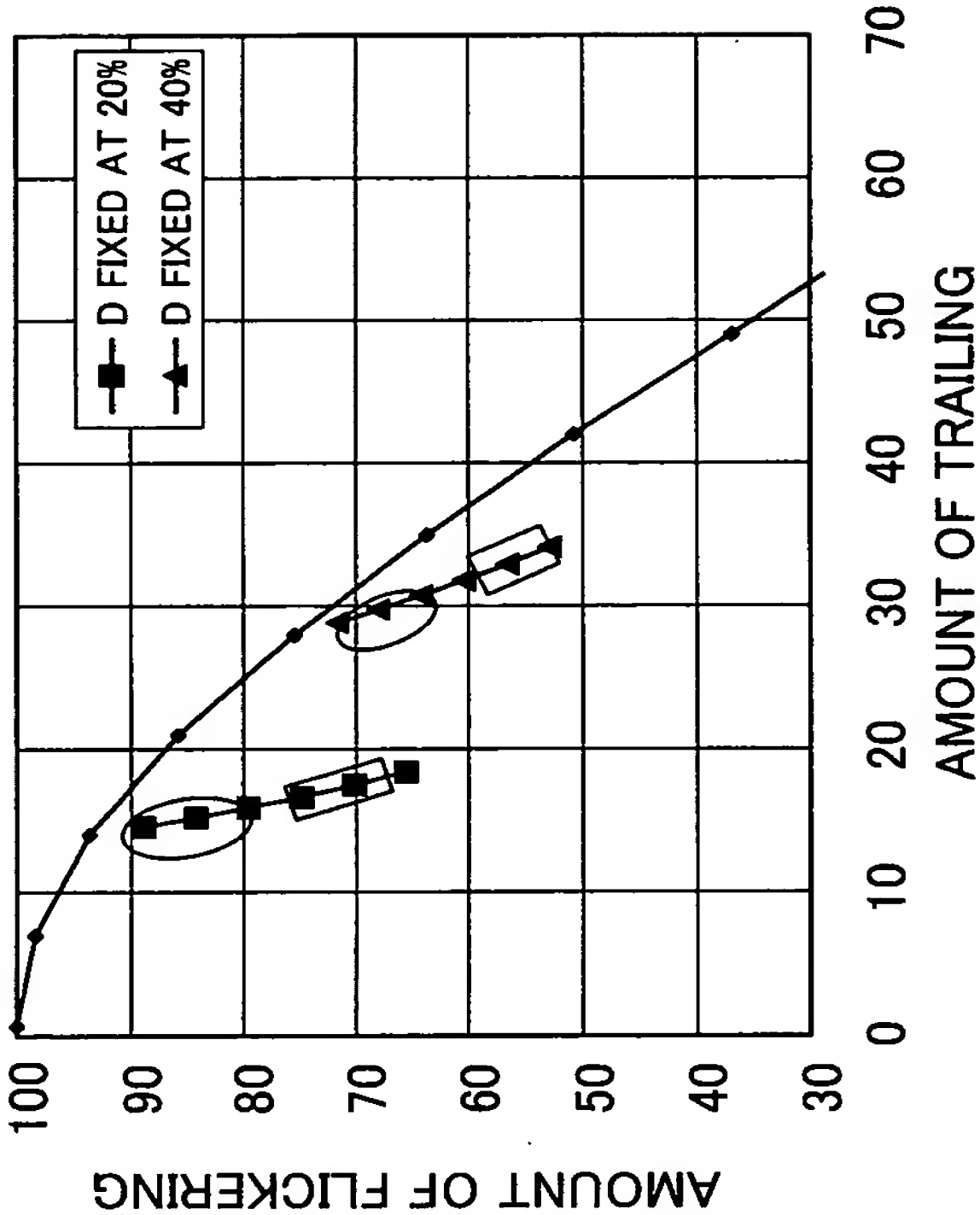


FIG. 45 (d)

LIGHT EMISSION INTENSITY RATIO S2	AMOUNT OF FLICKERING	AMOUNT OF TRAILING
95	71.7	28.9
90	67.9	29.8
85	64.2	30.8
80	60.4	31.8
75	56.7	32.9
70	52.9	34.1

D FIXED AT 40%

FIG. 46 (a)

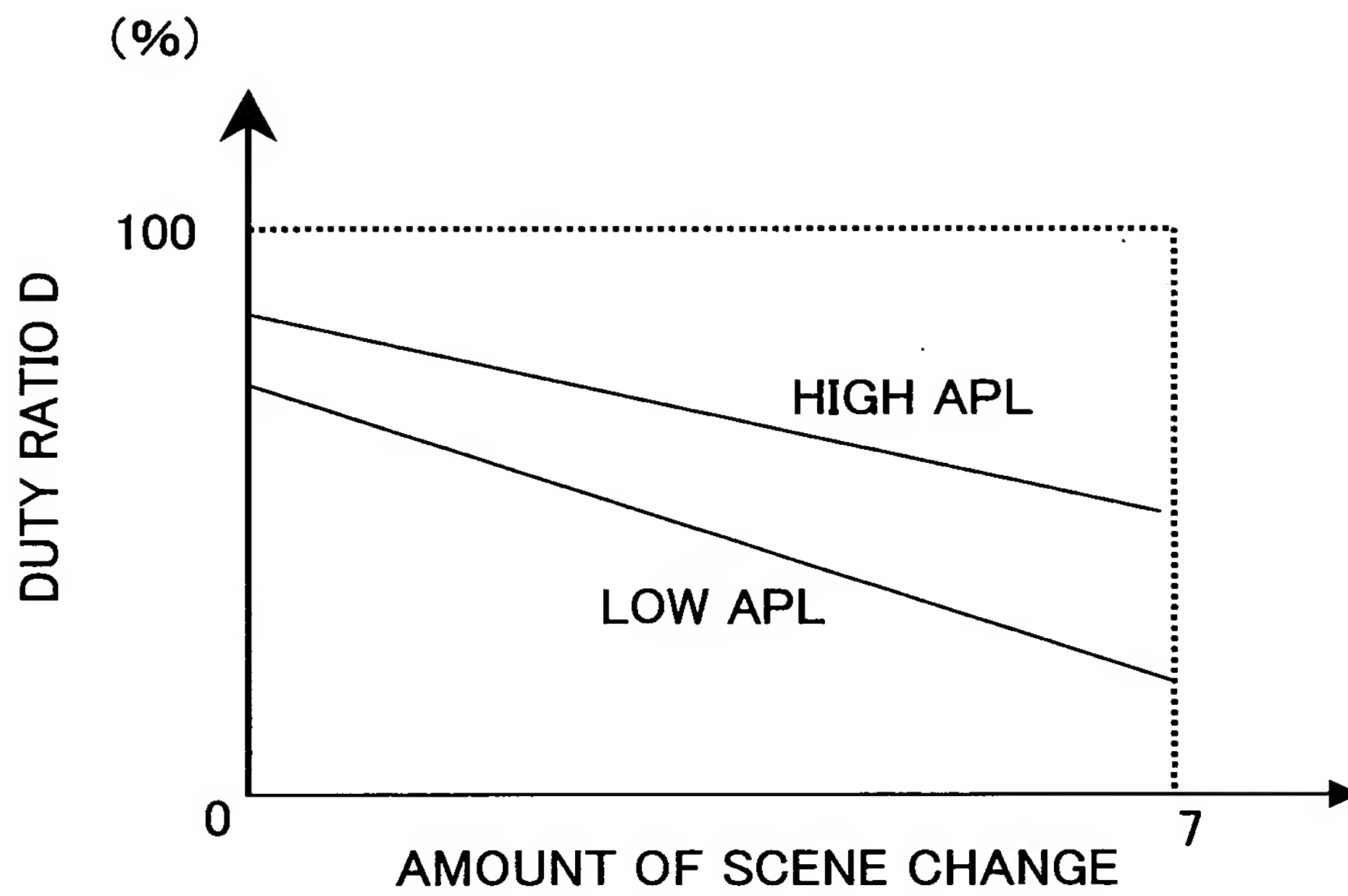


FIG. 46 (b)

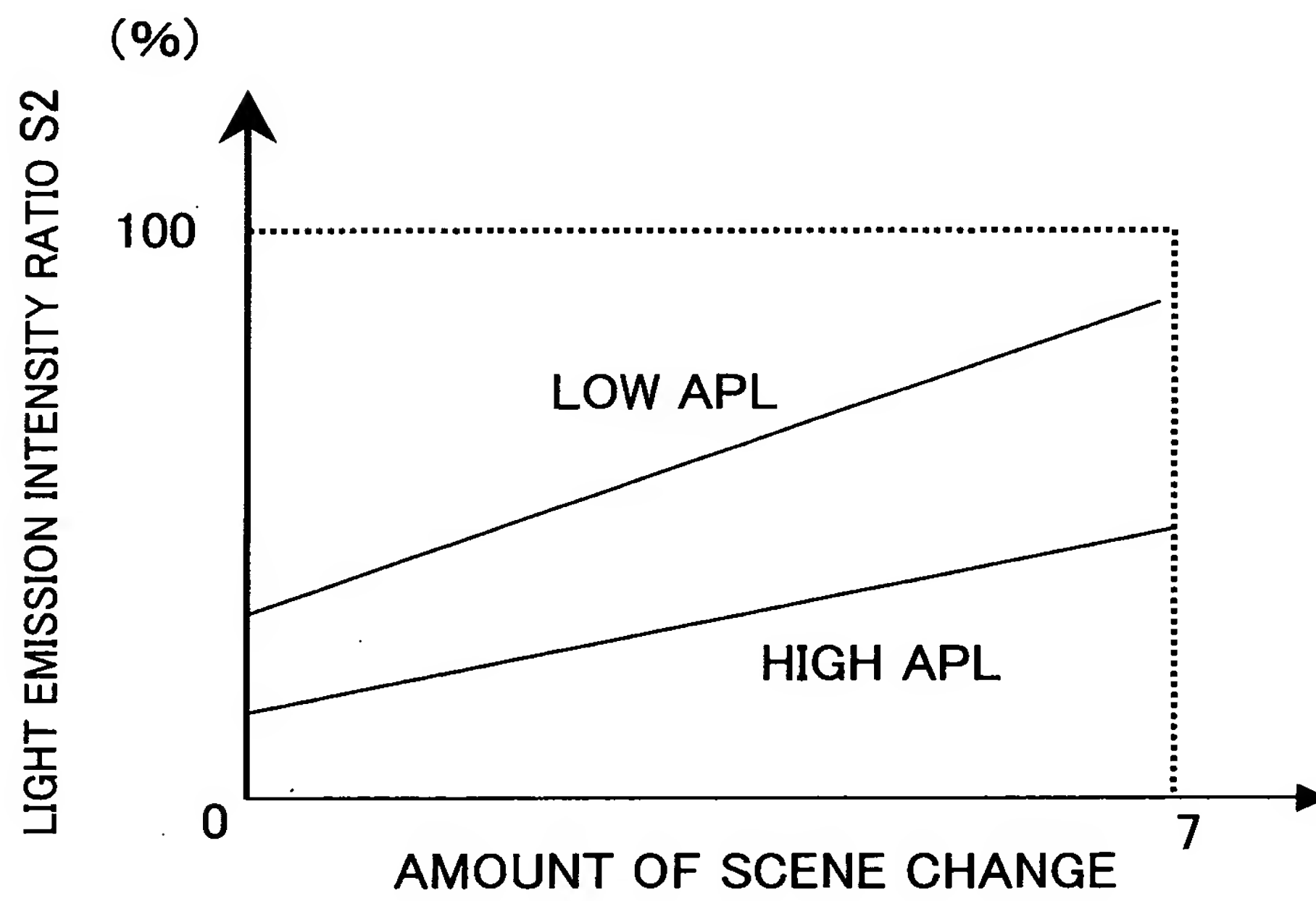


FIG. 47

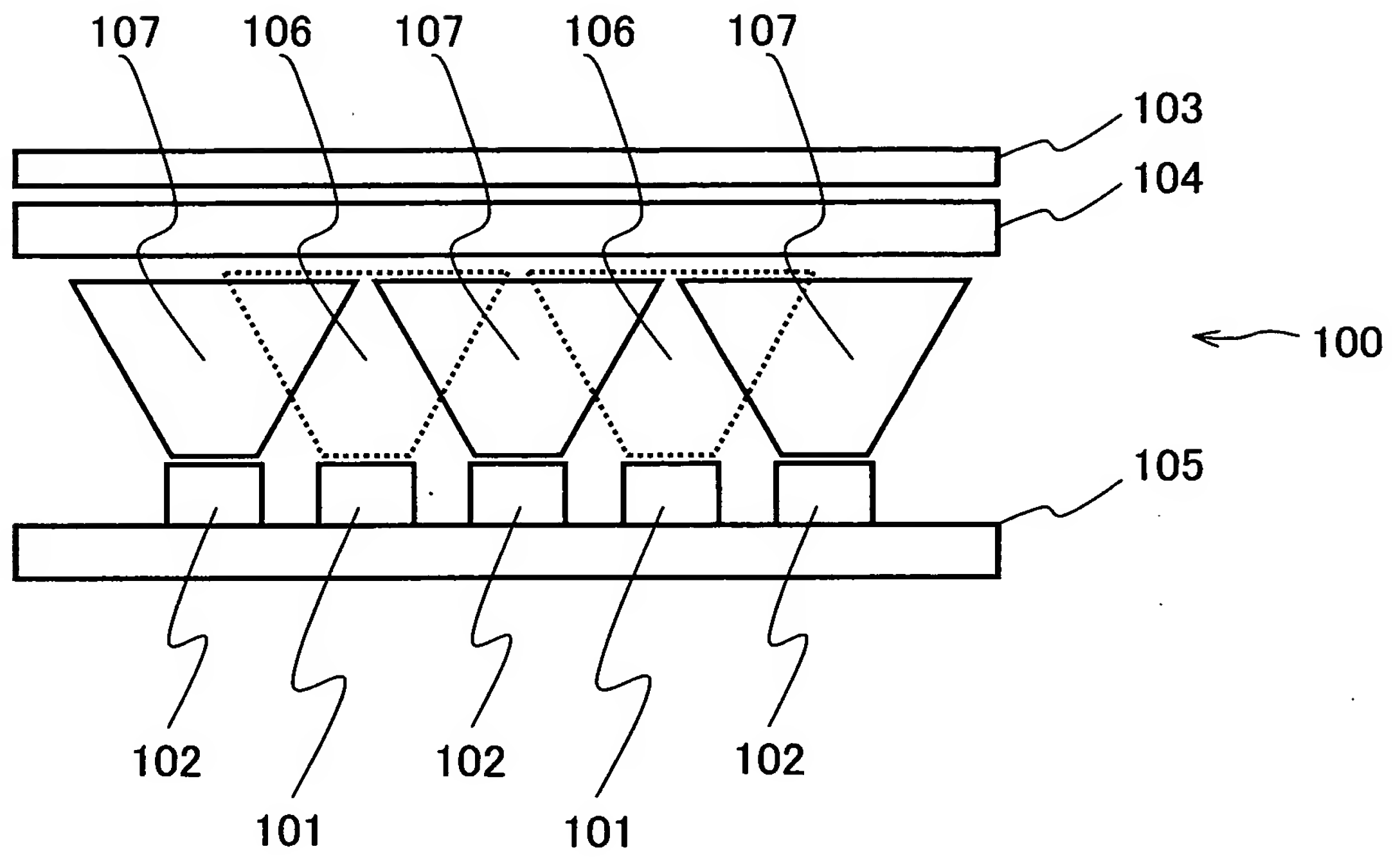


FIG. 48

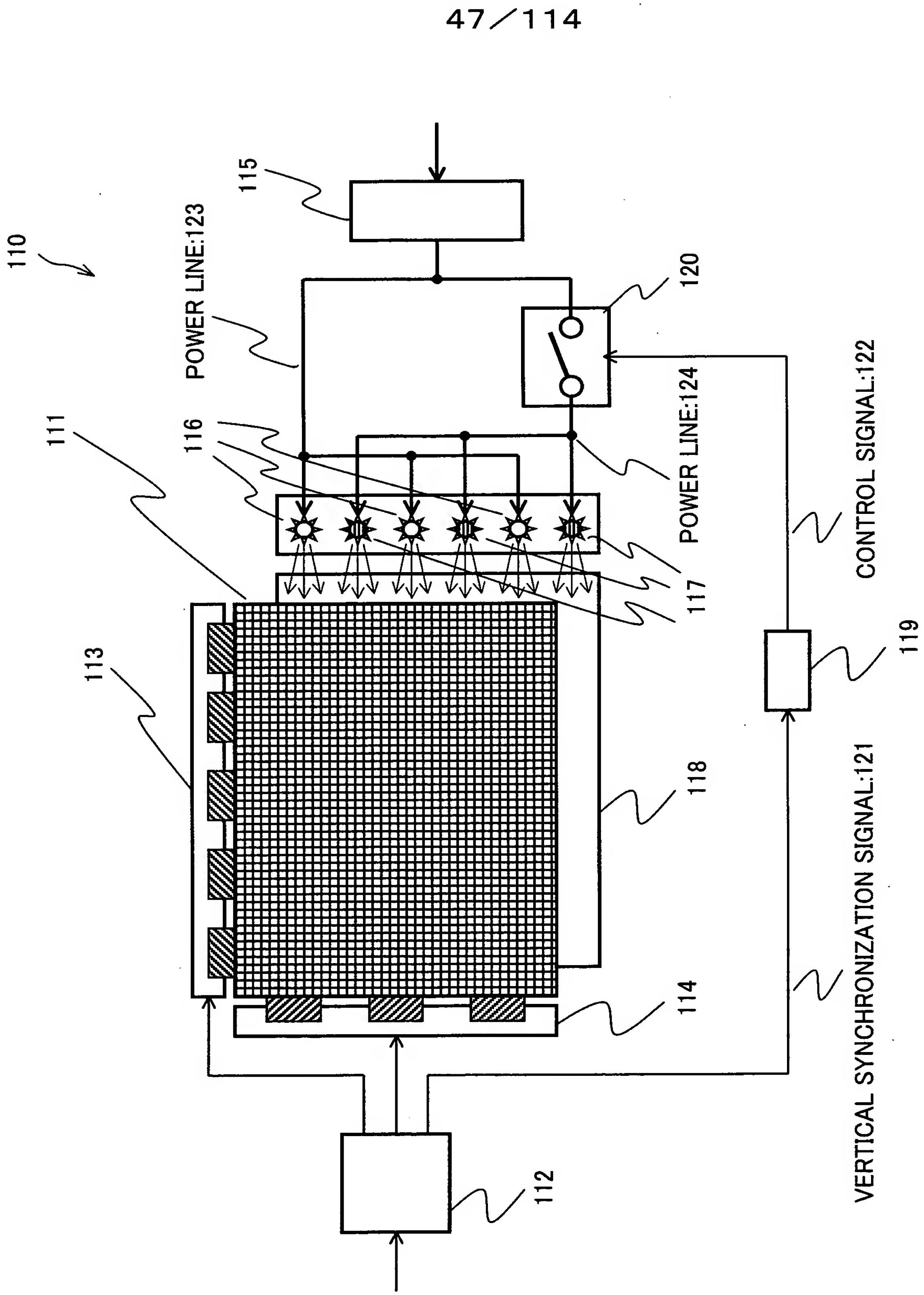
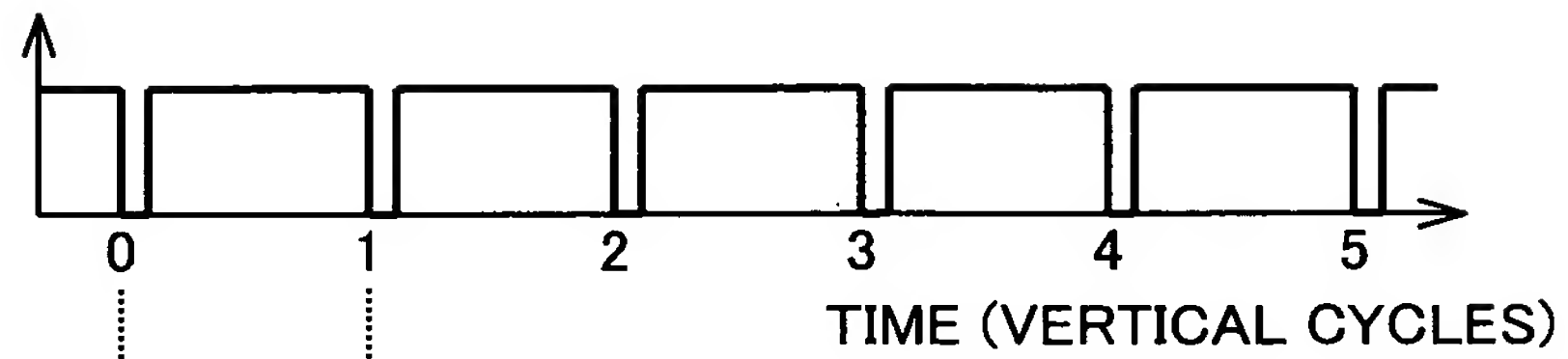
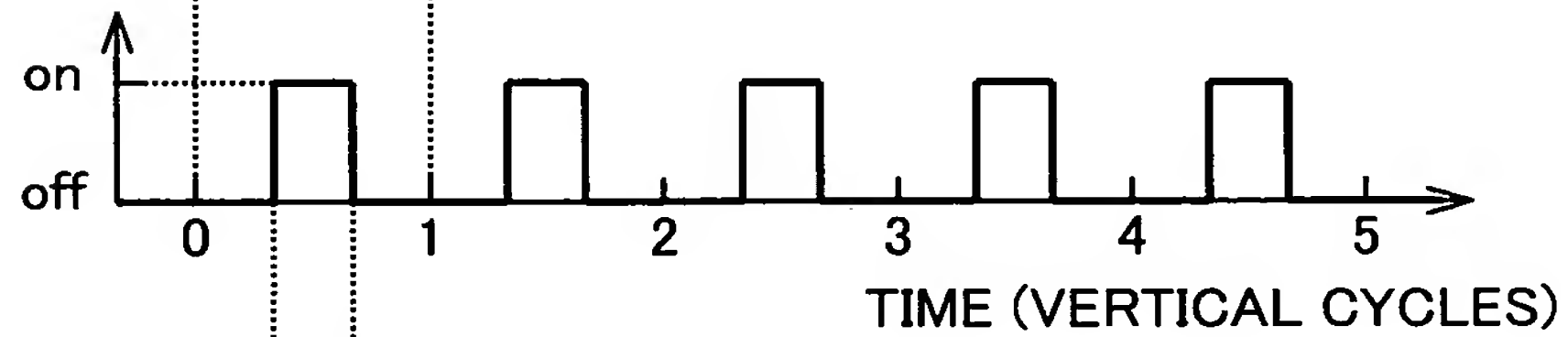


FIG. 49

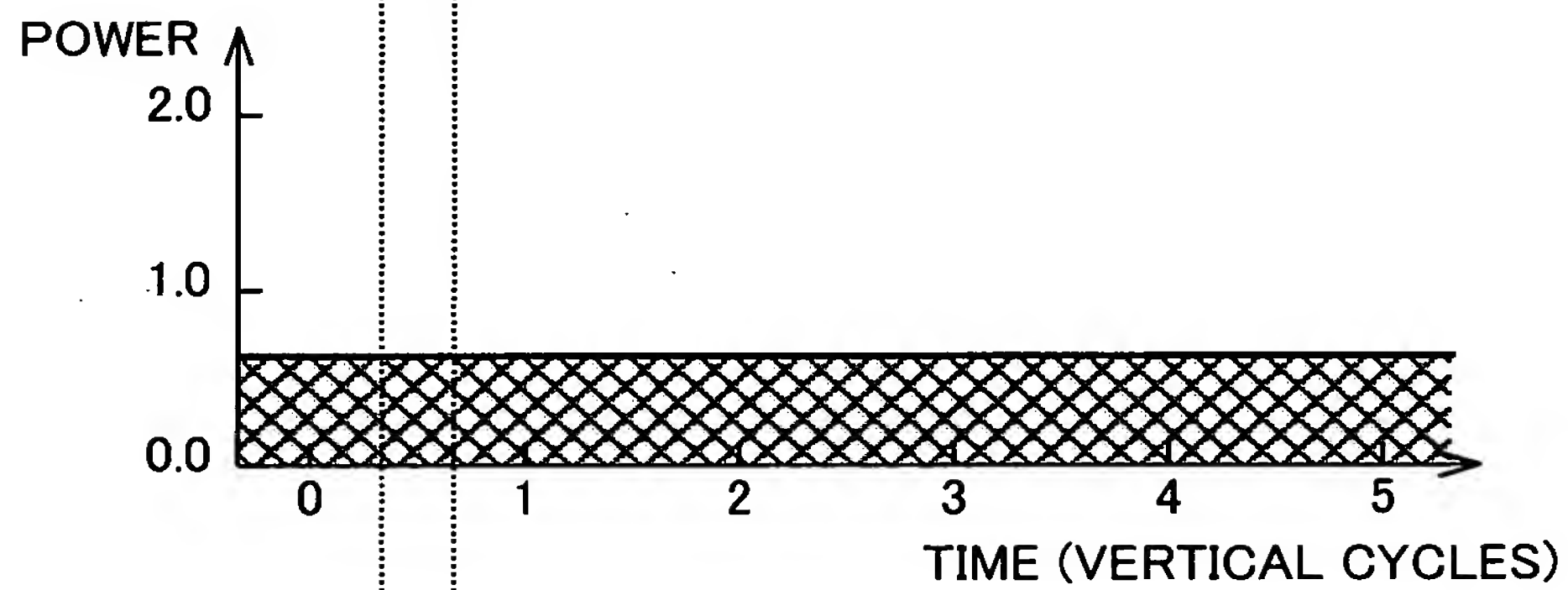
(a)



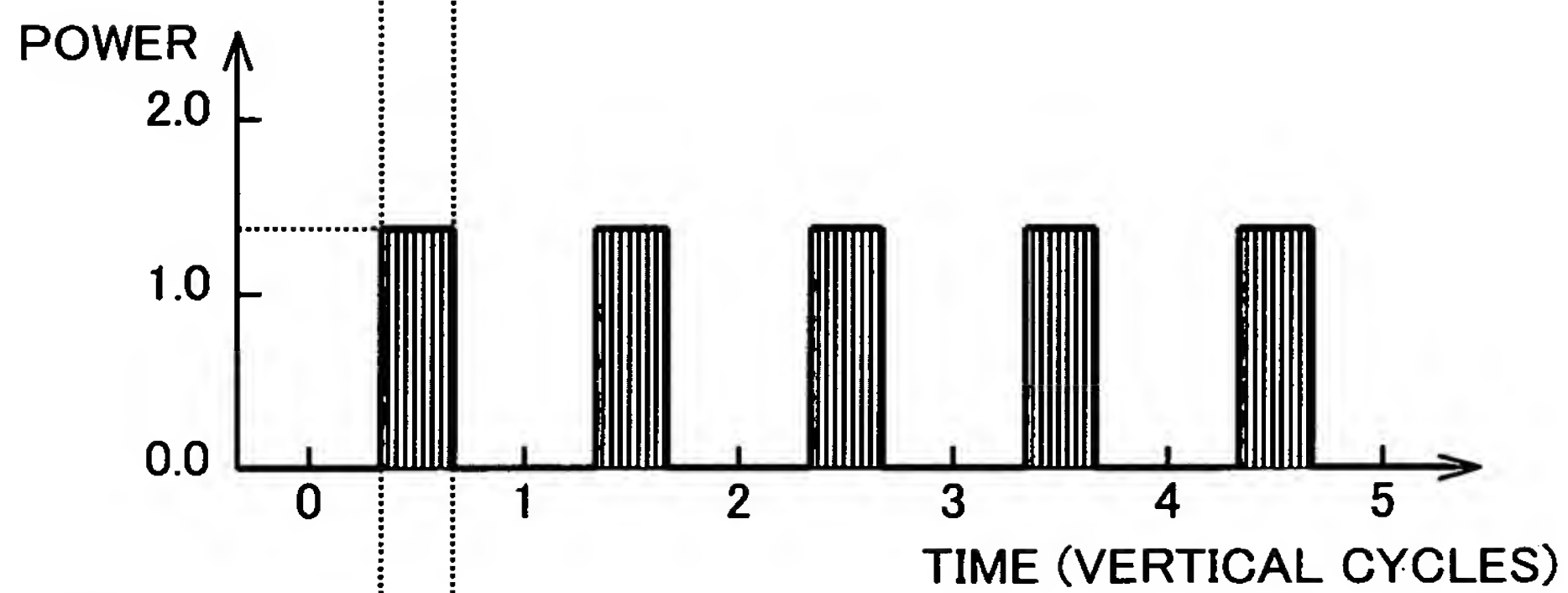
(b)



(c)



(d)



(e)

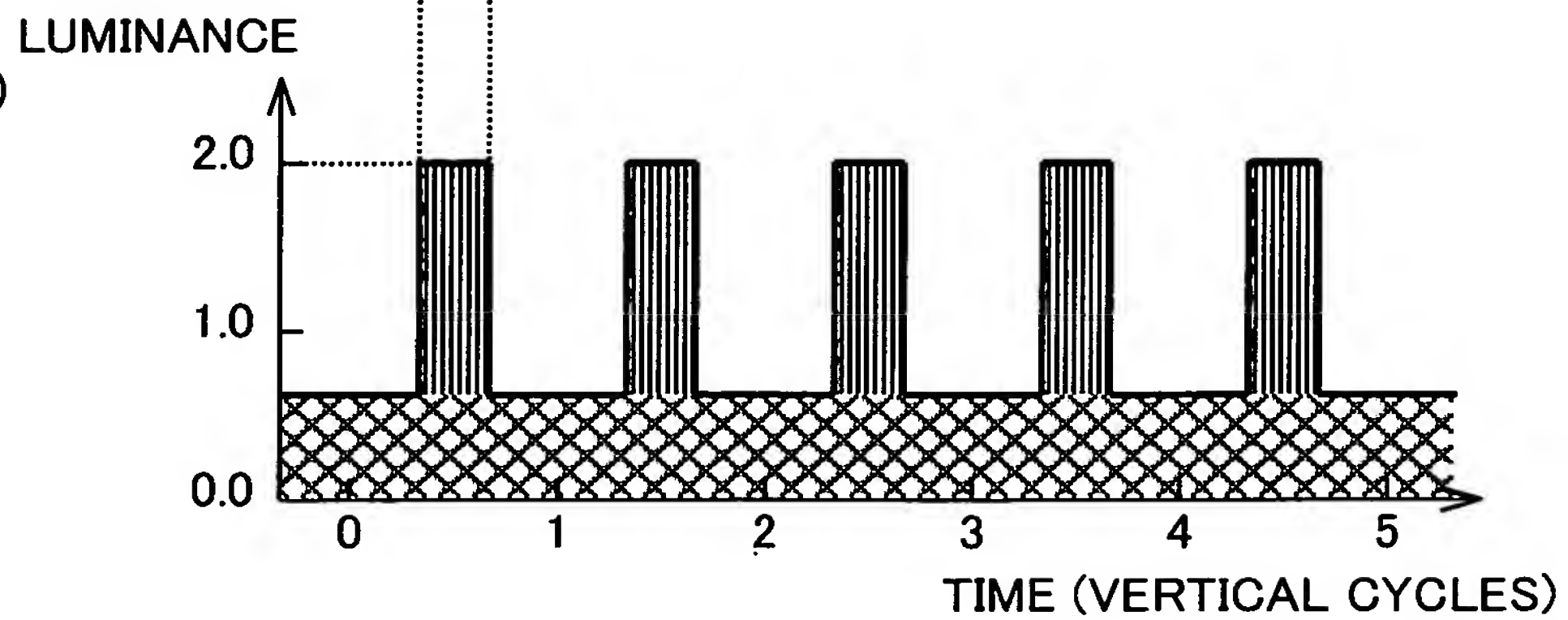


FIG. 50

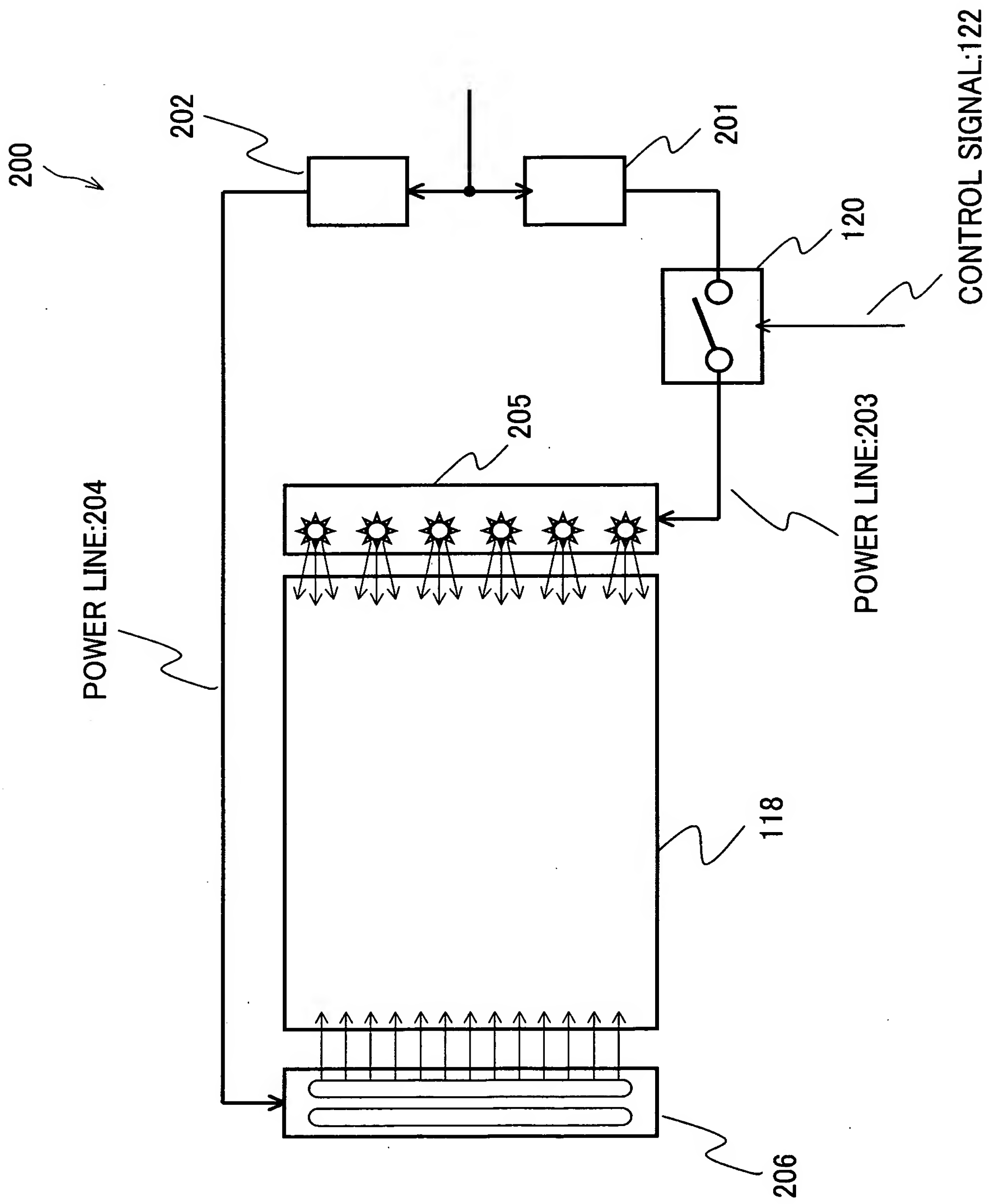


FIG. 51

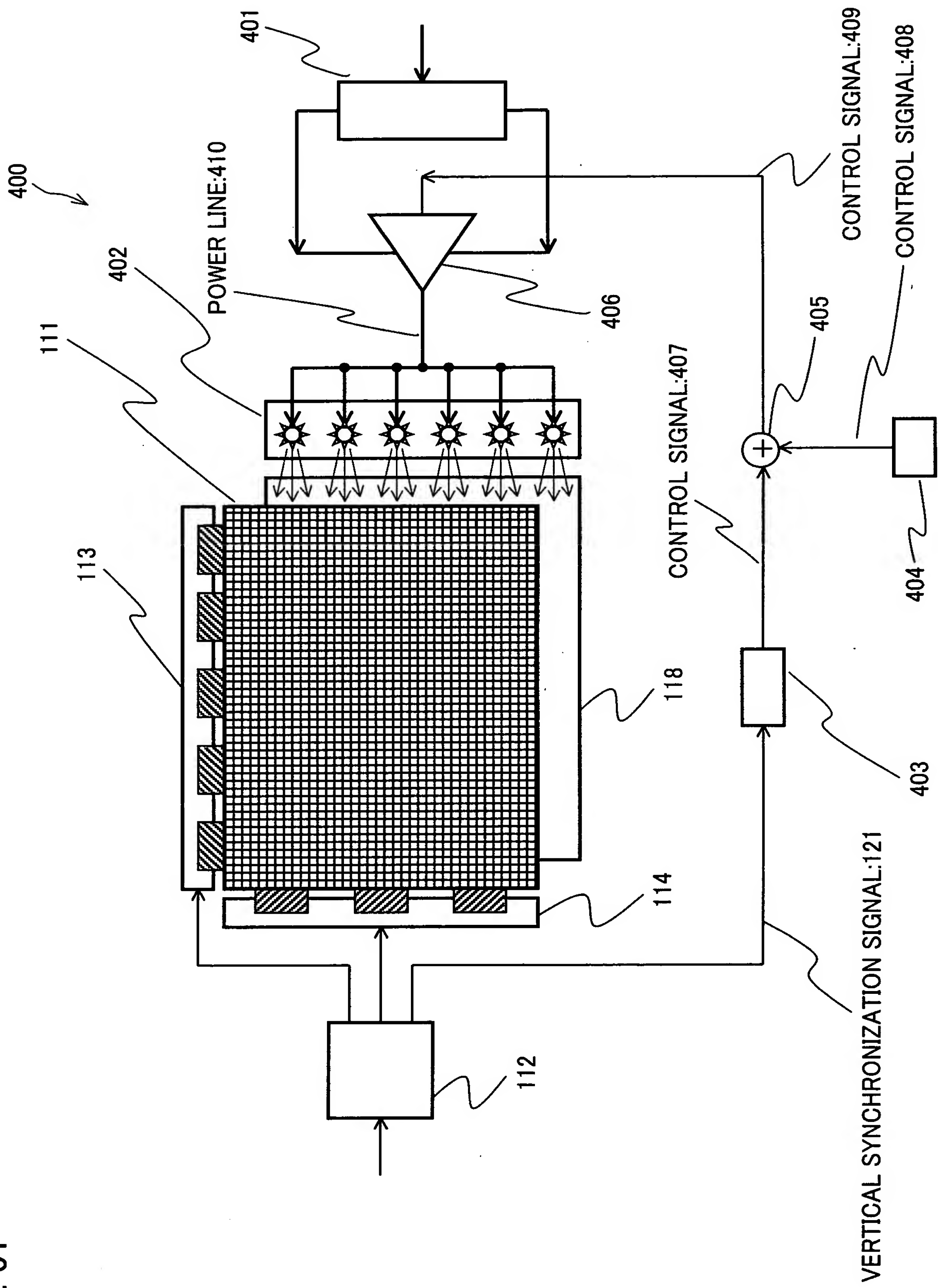
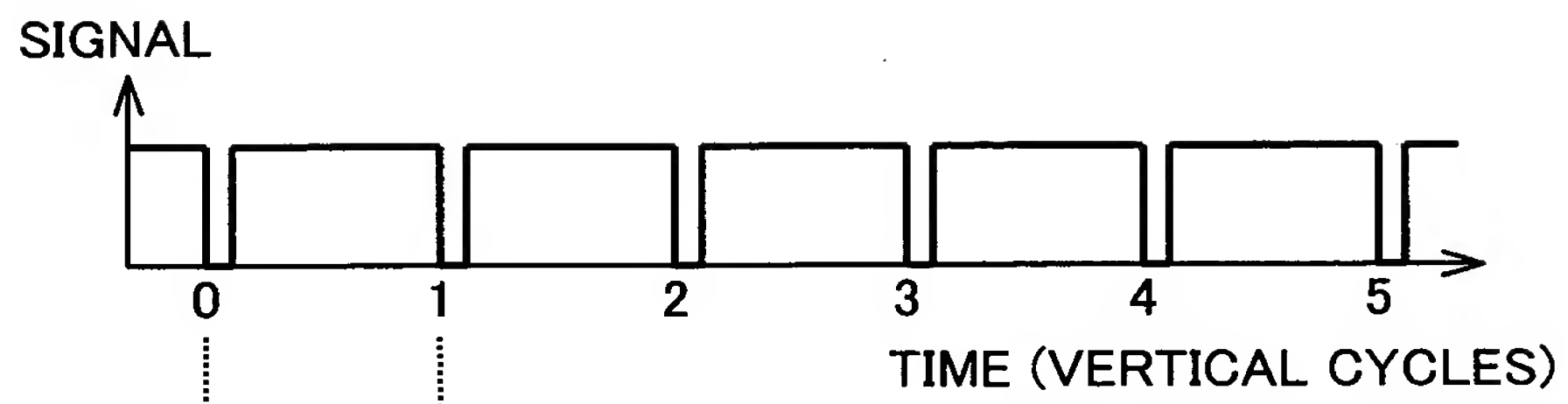
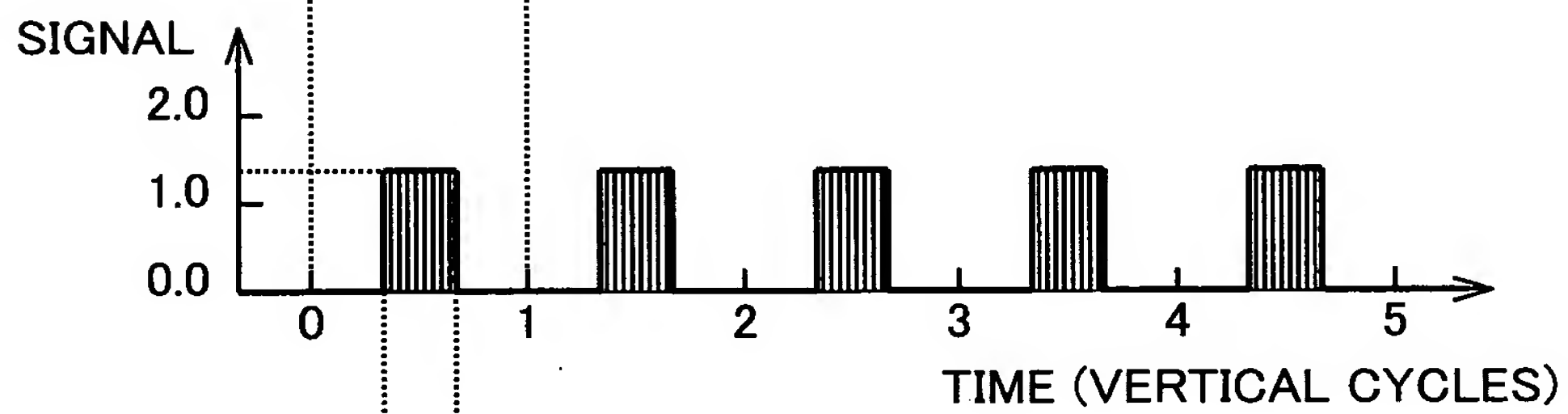


FIG. 52

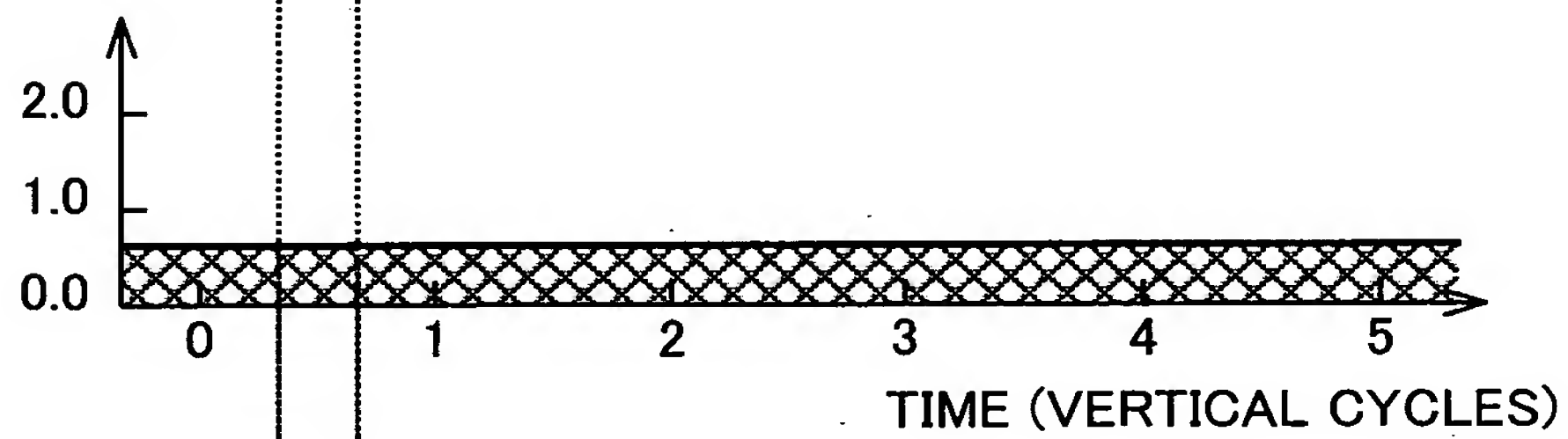
(a)



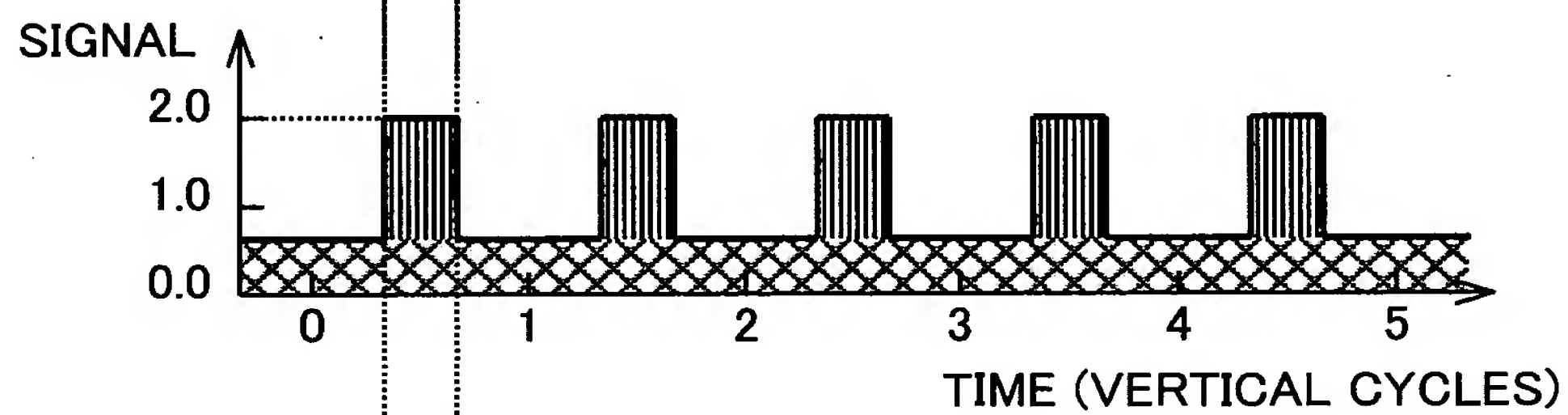
(b)



(c)



(d)



(e)

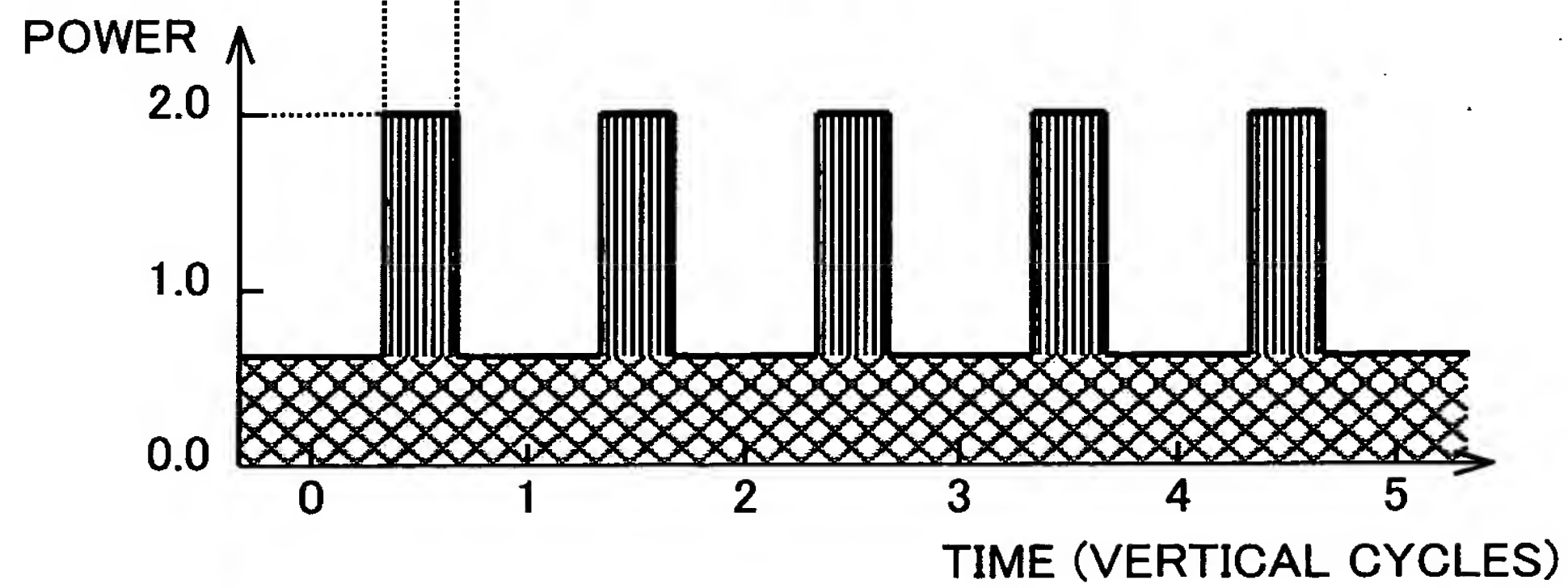


FIG. 53

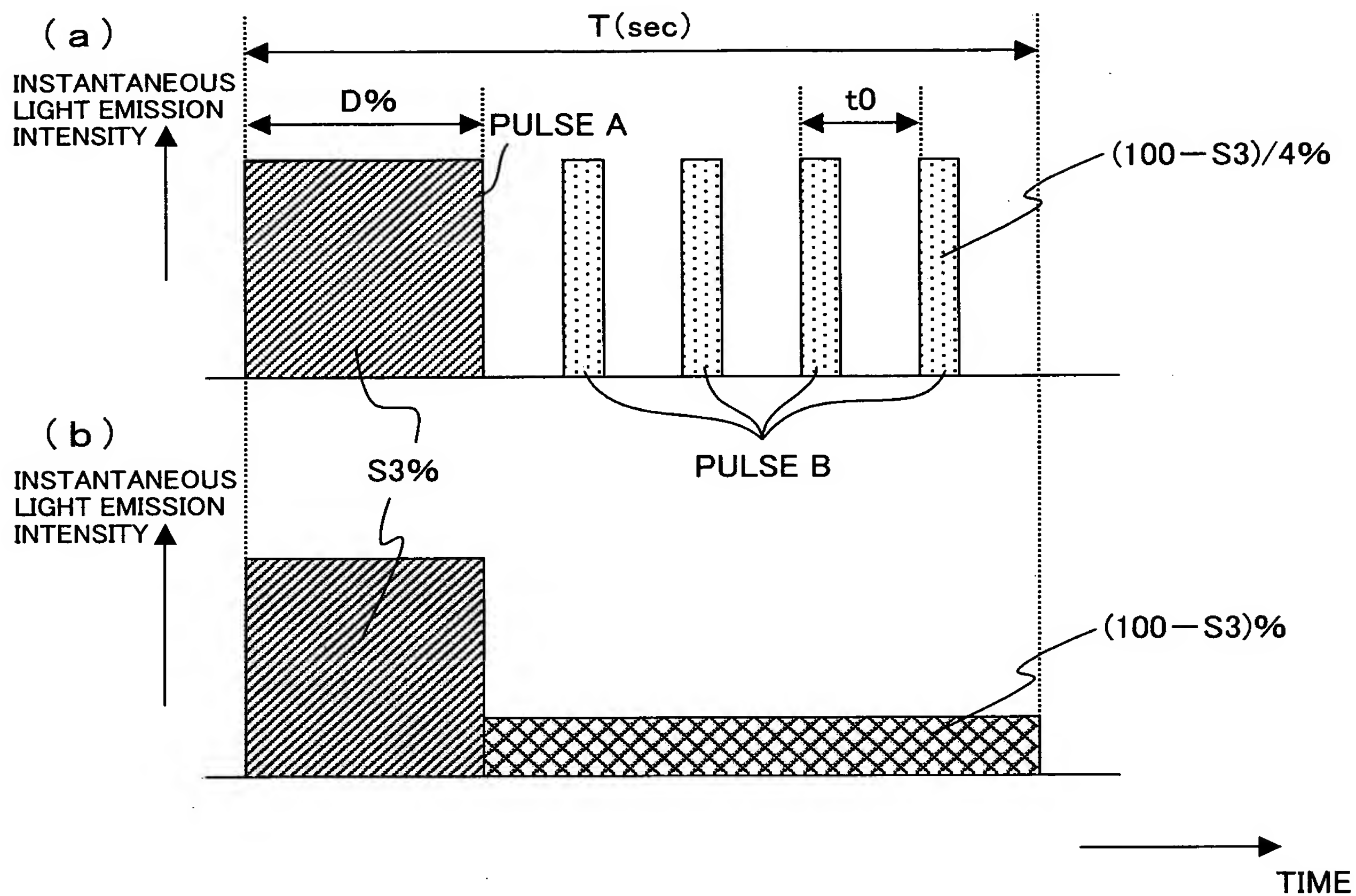


FIG. 54

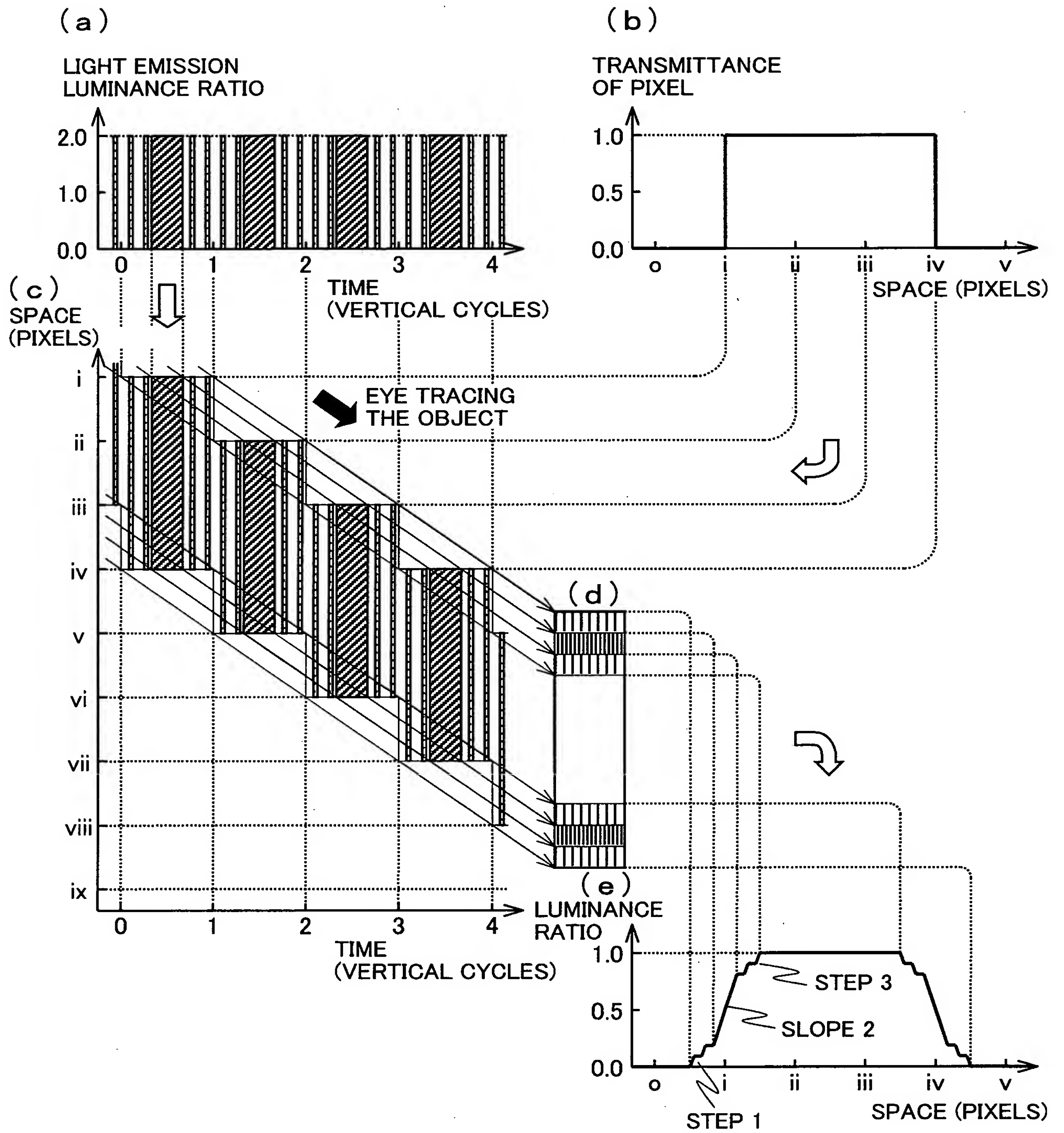


FIG. 55 (a)

LIGHT EMISSION WAVEFORM OF
PRESENT EMBODIMENT

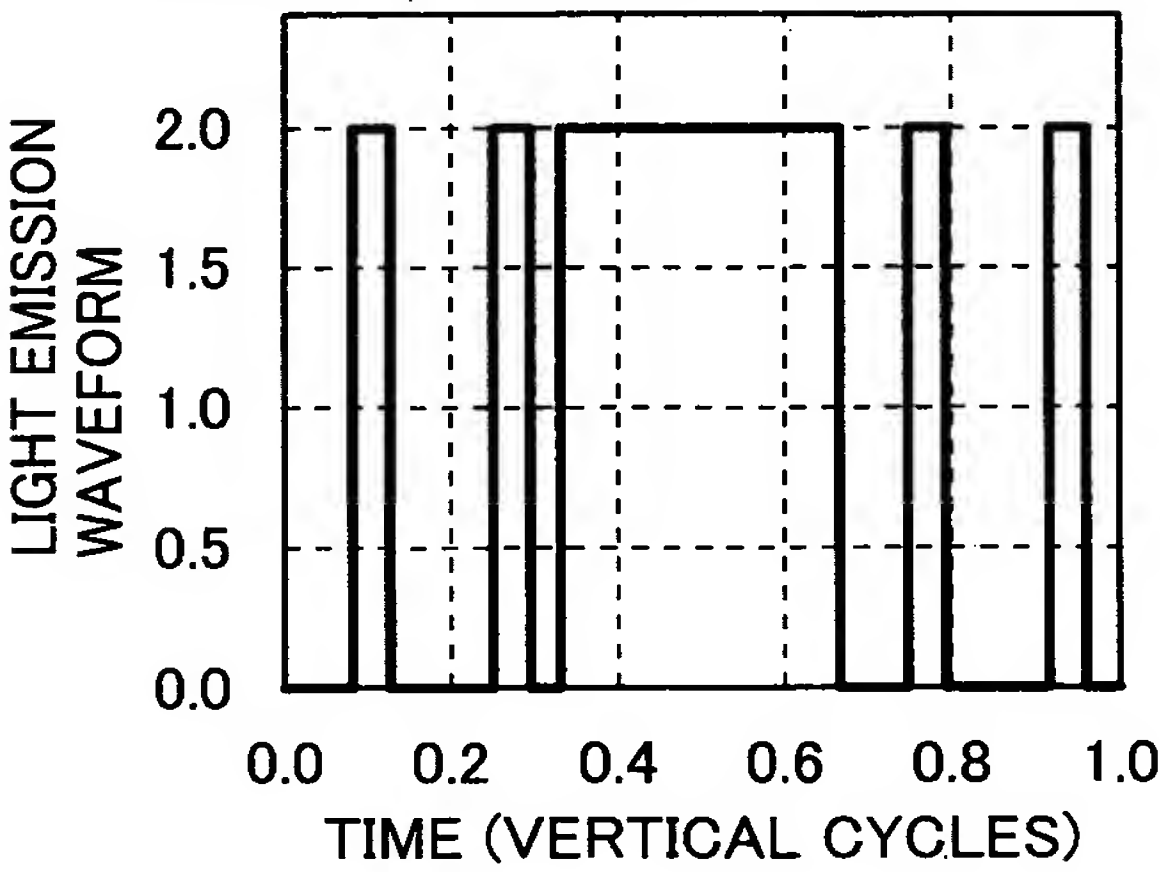


FIG. 55 (b)

CONVENTIONAL LIGHT
EMISSION WAVEFORM

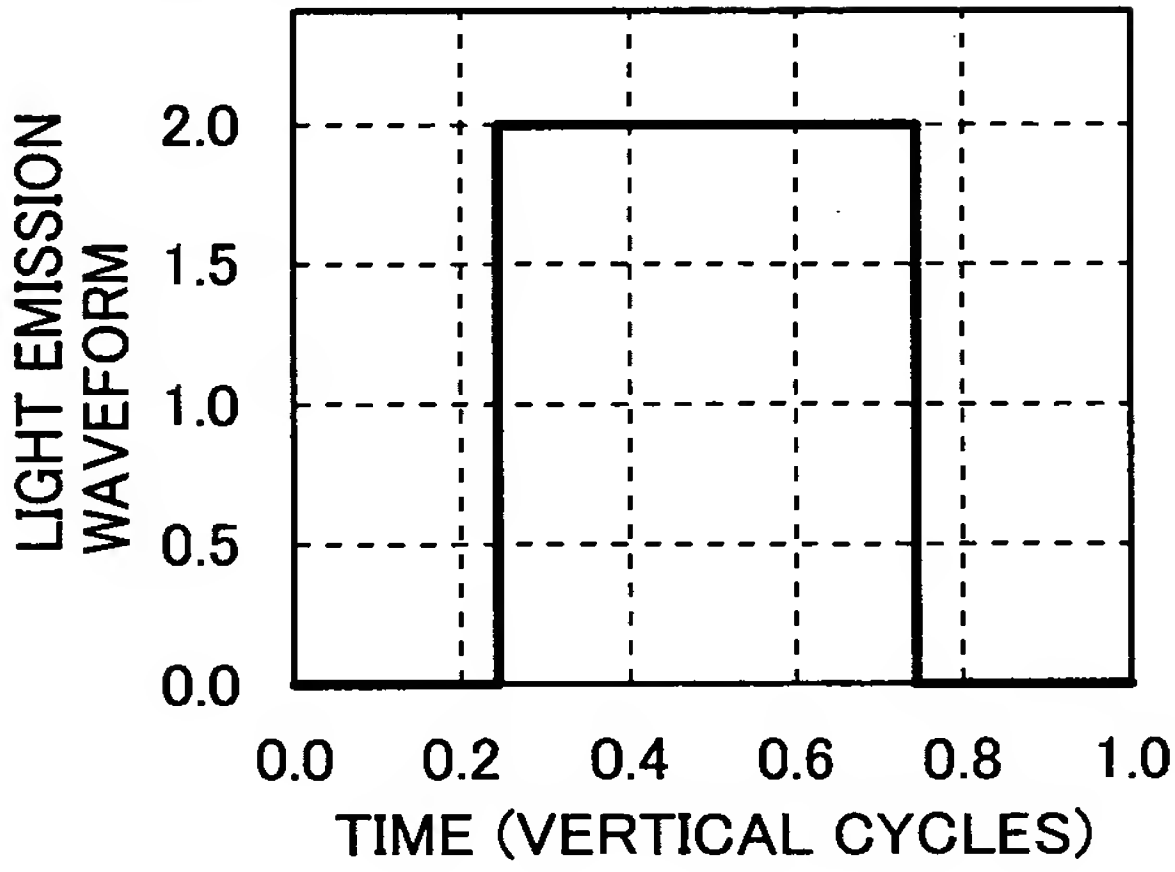


FIG. 55 (c)

COMPARISON OF HARMONICS

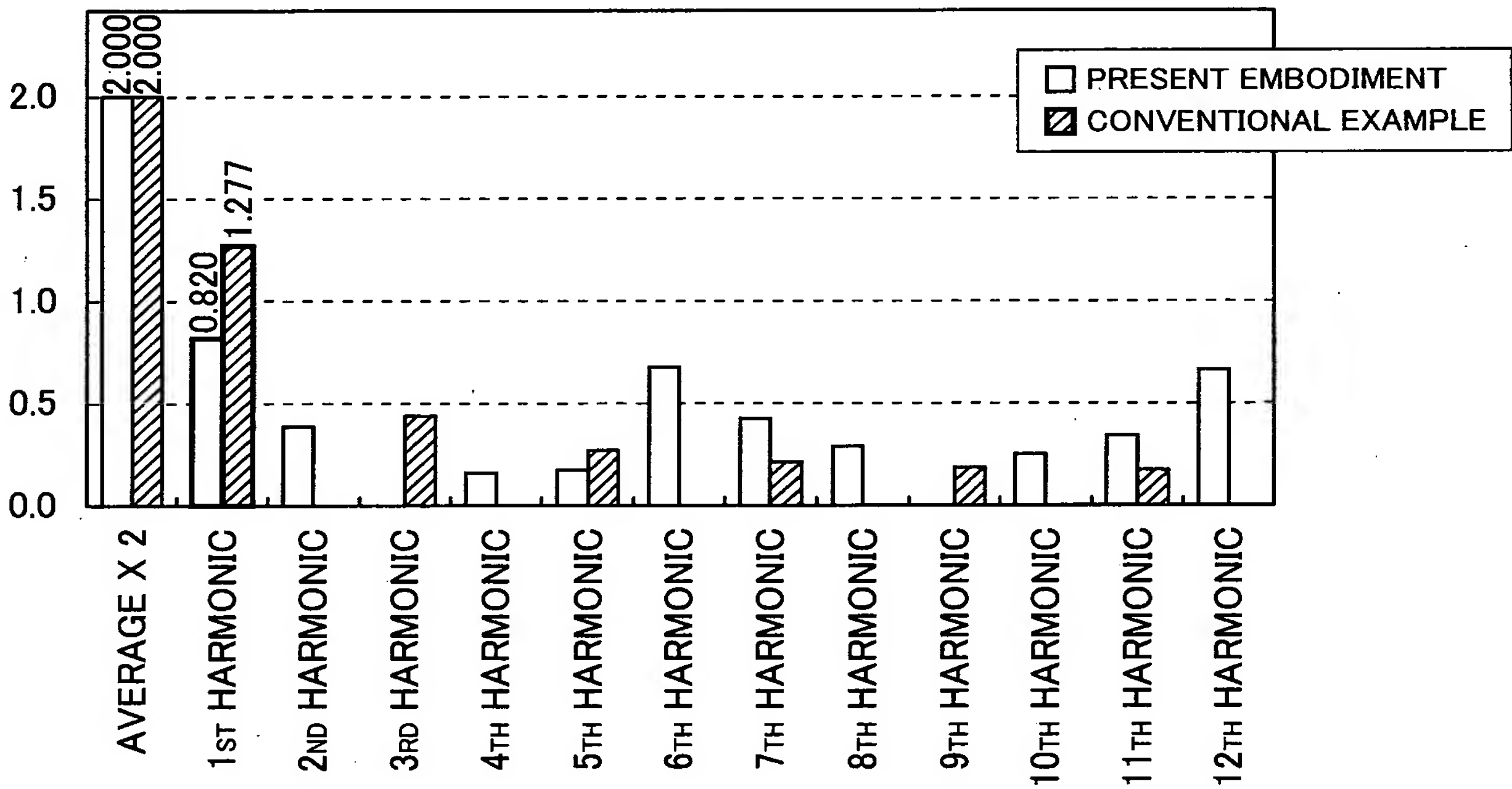


FIG. 56

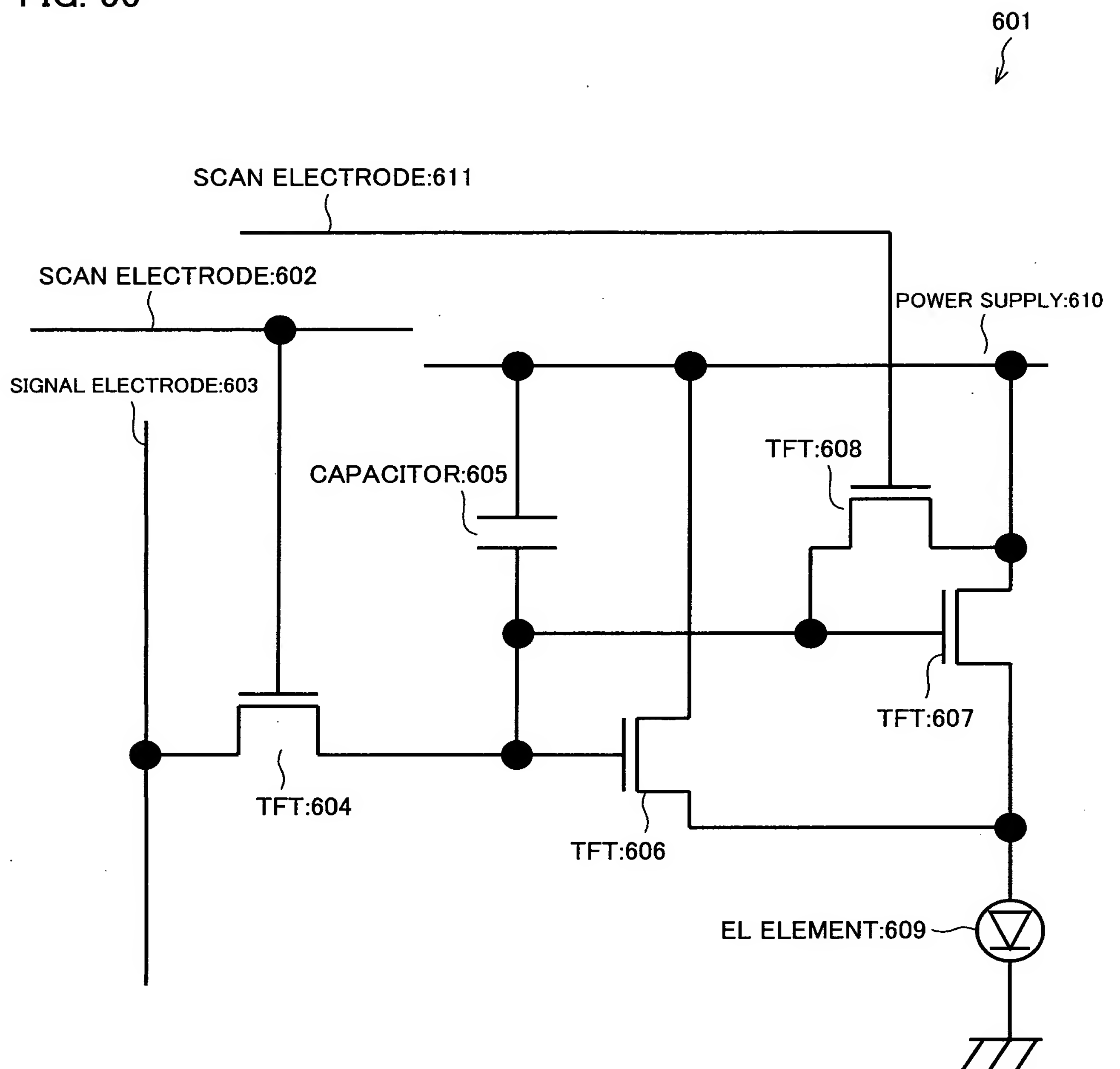


FIG. 57

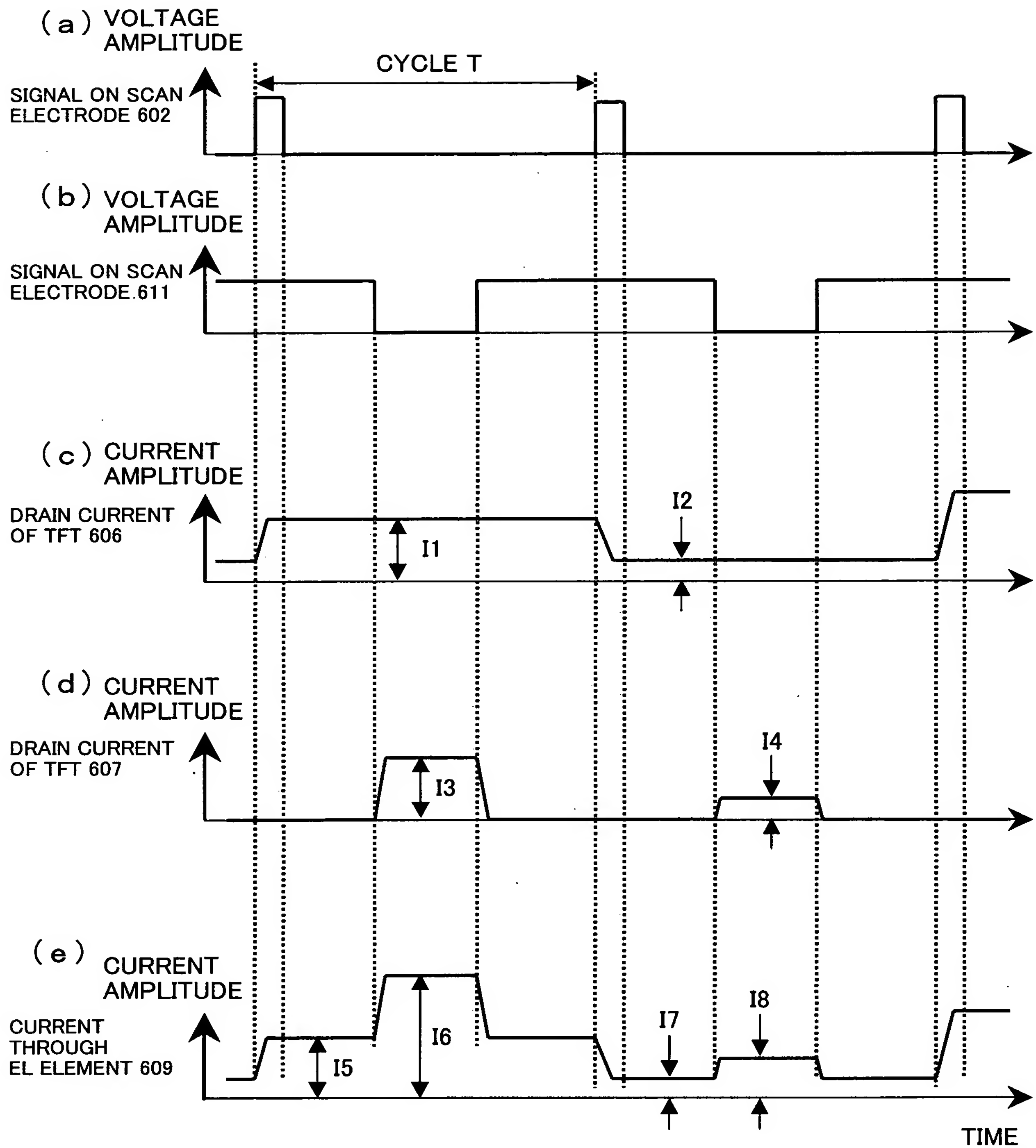


FIG. 58

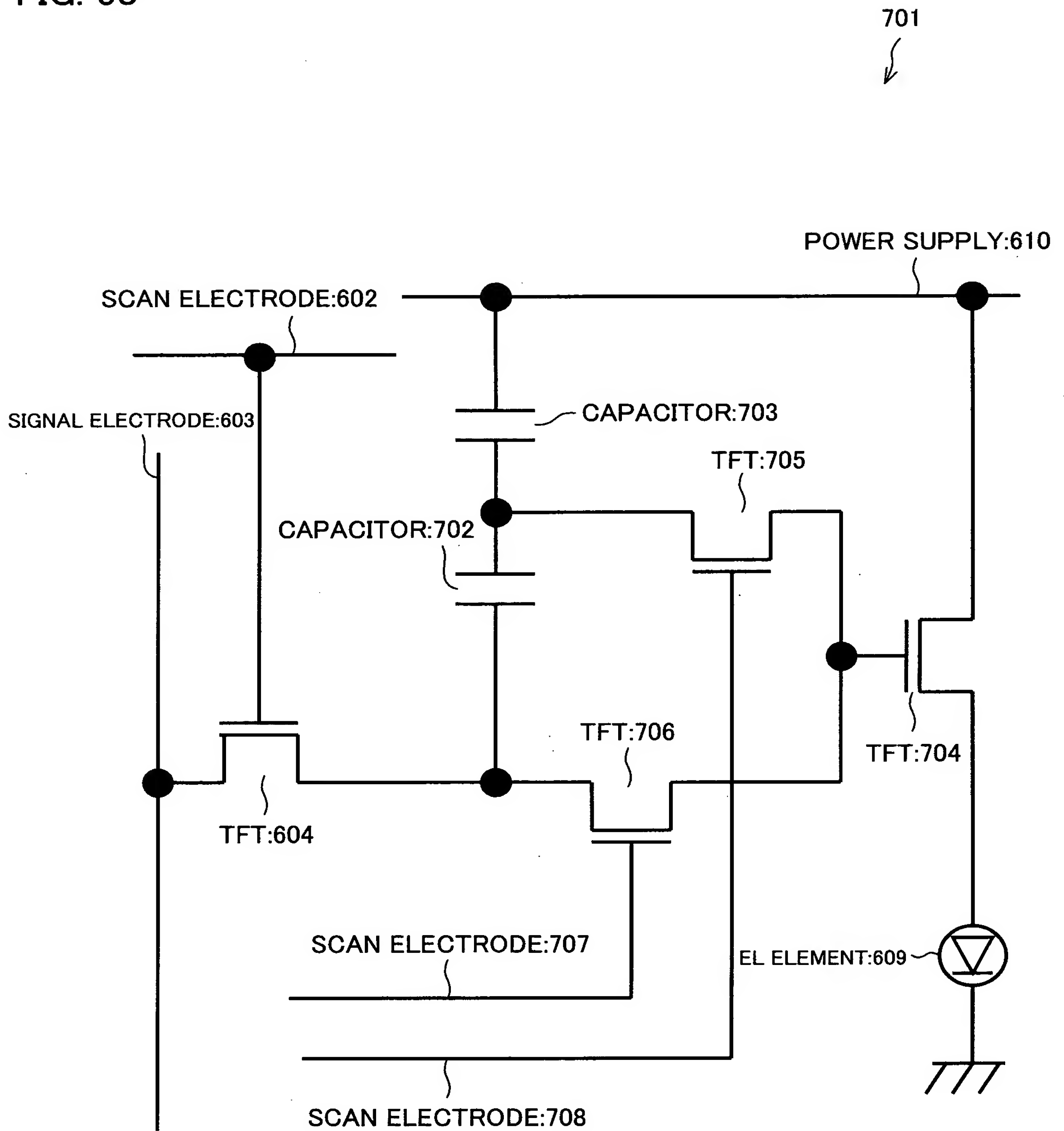


FIG. 59

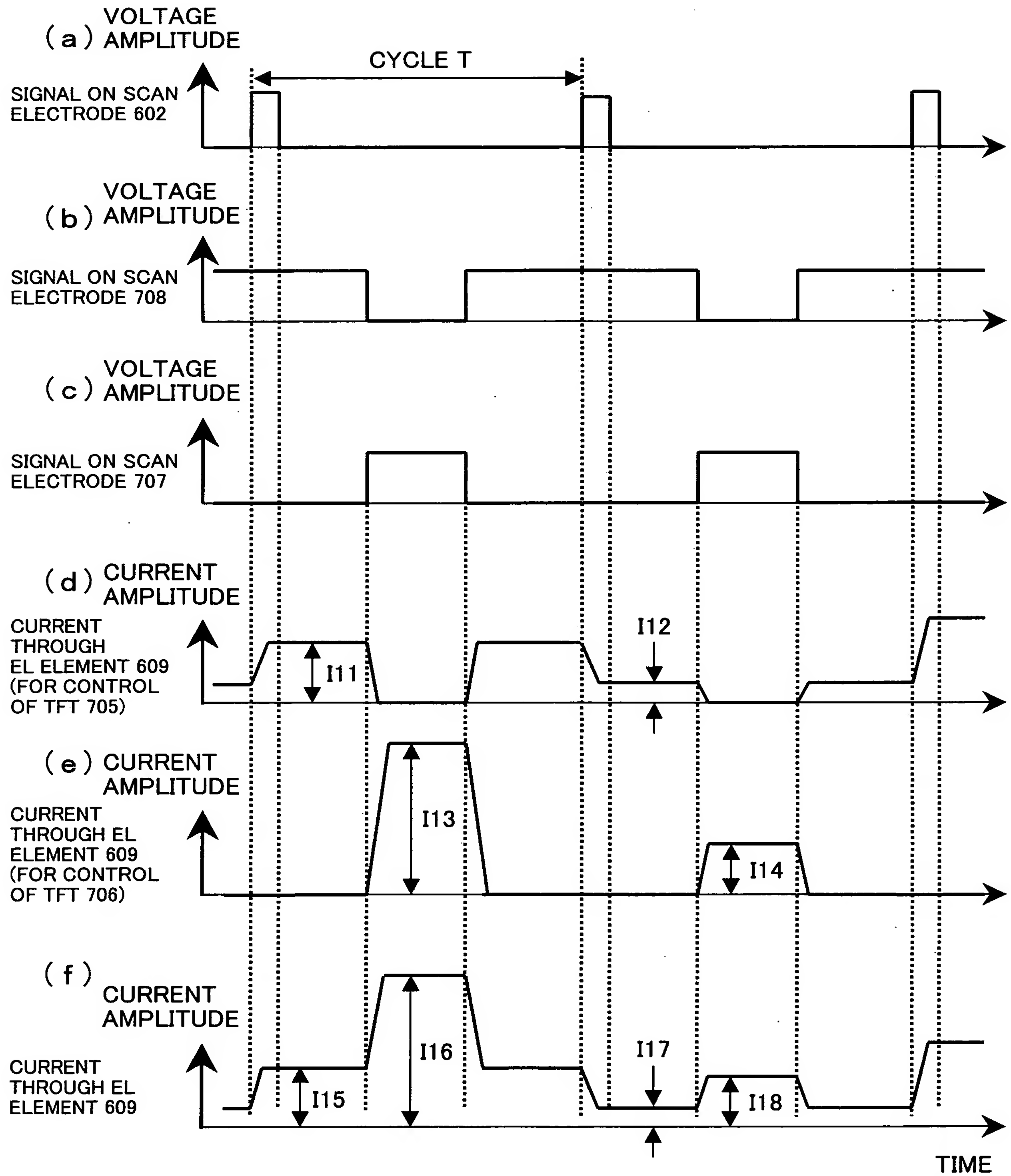


FIG. 60

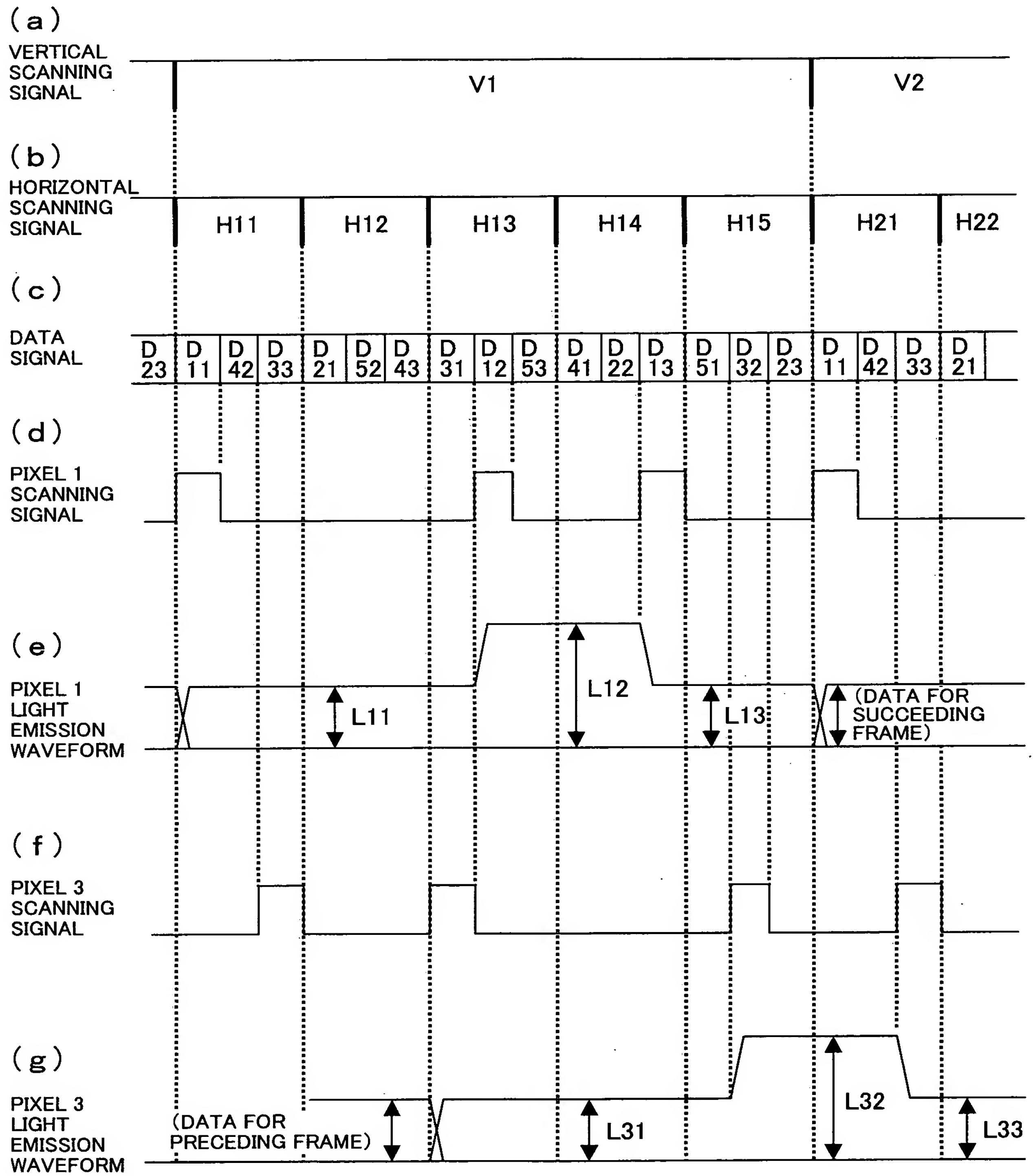
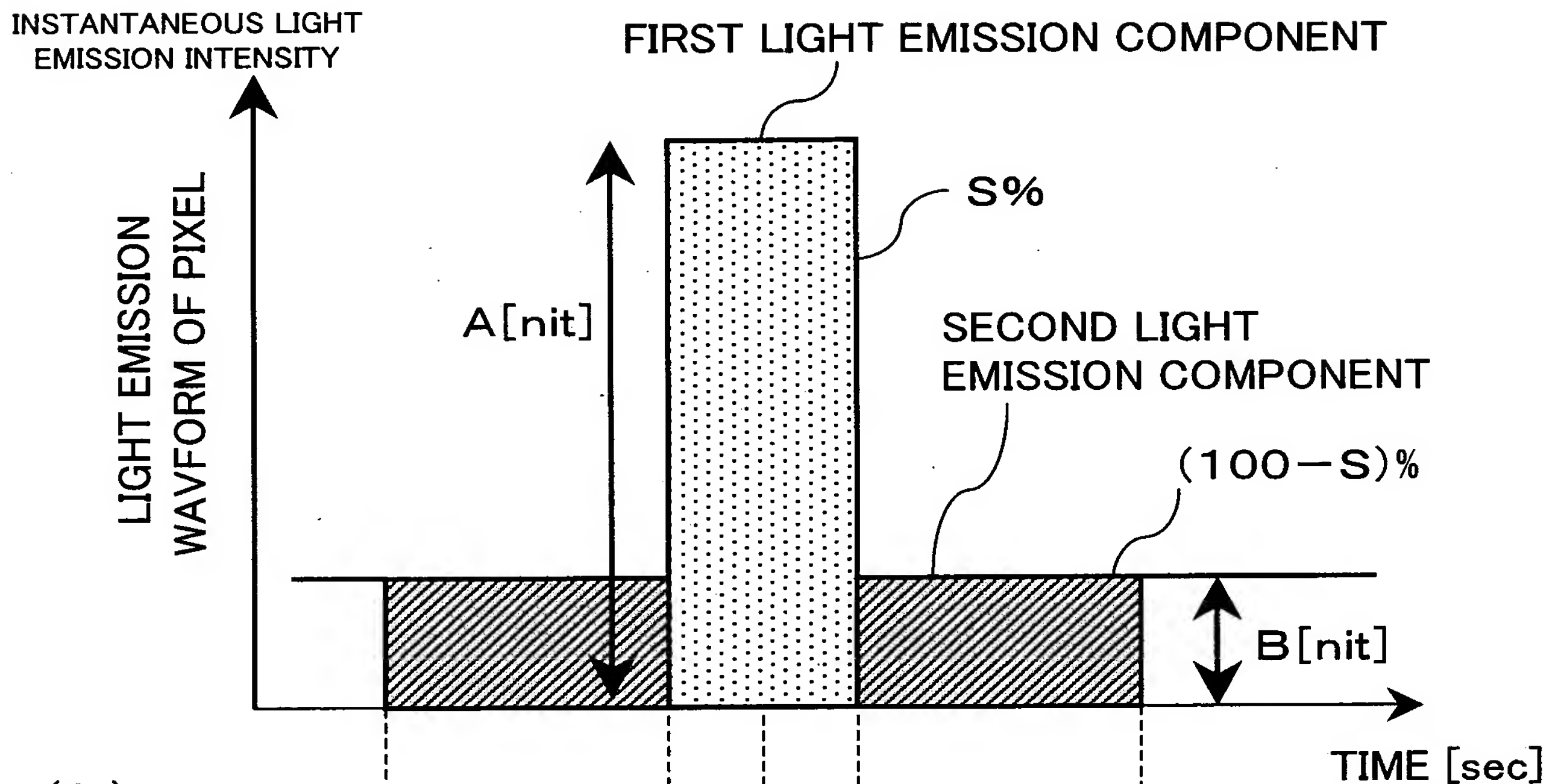


FIG.61

(a)



(b)

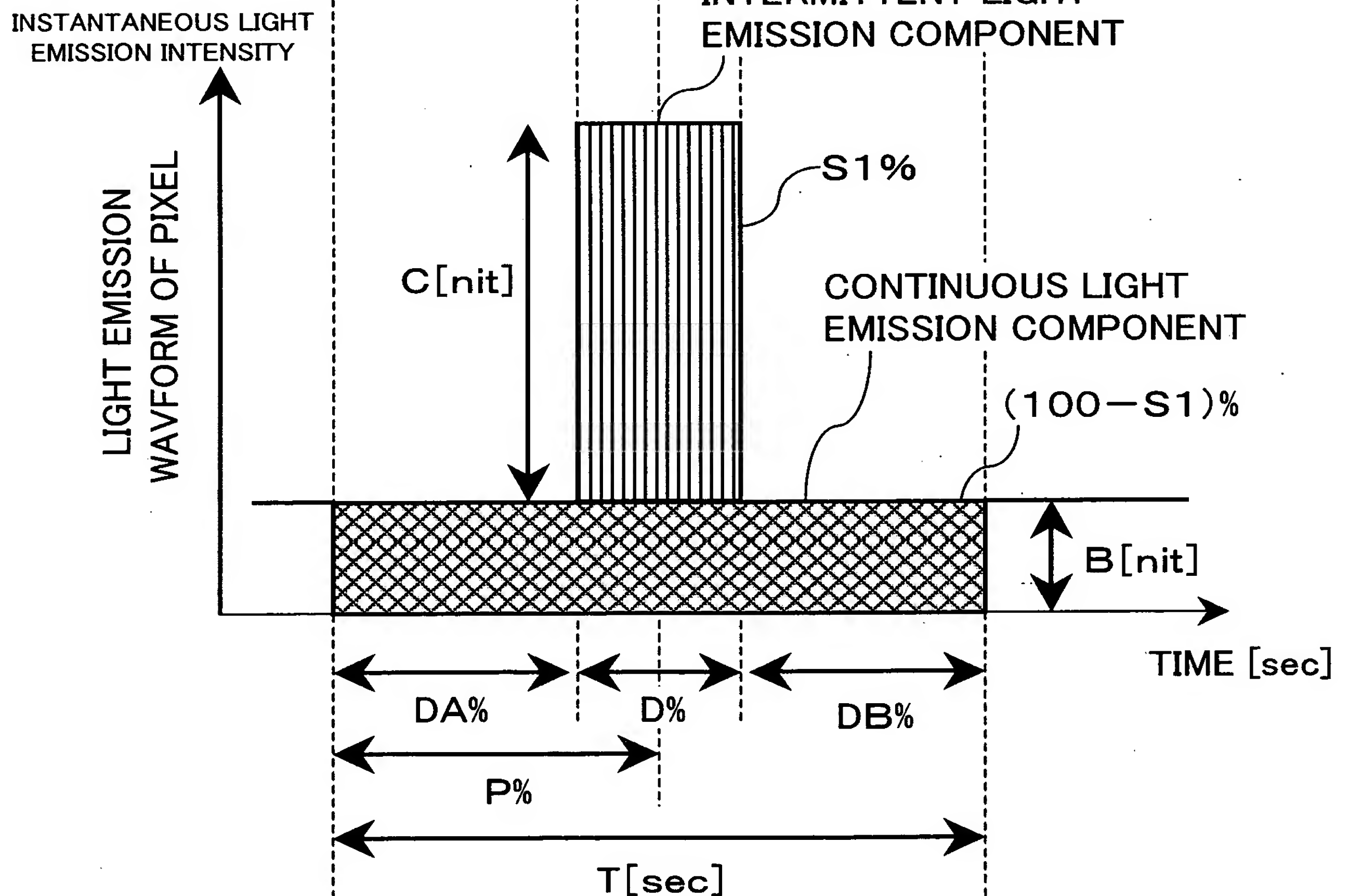


FIG.62

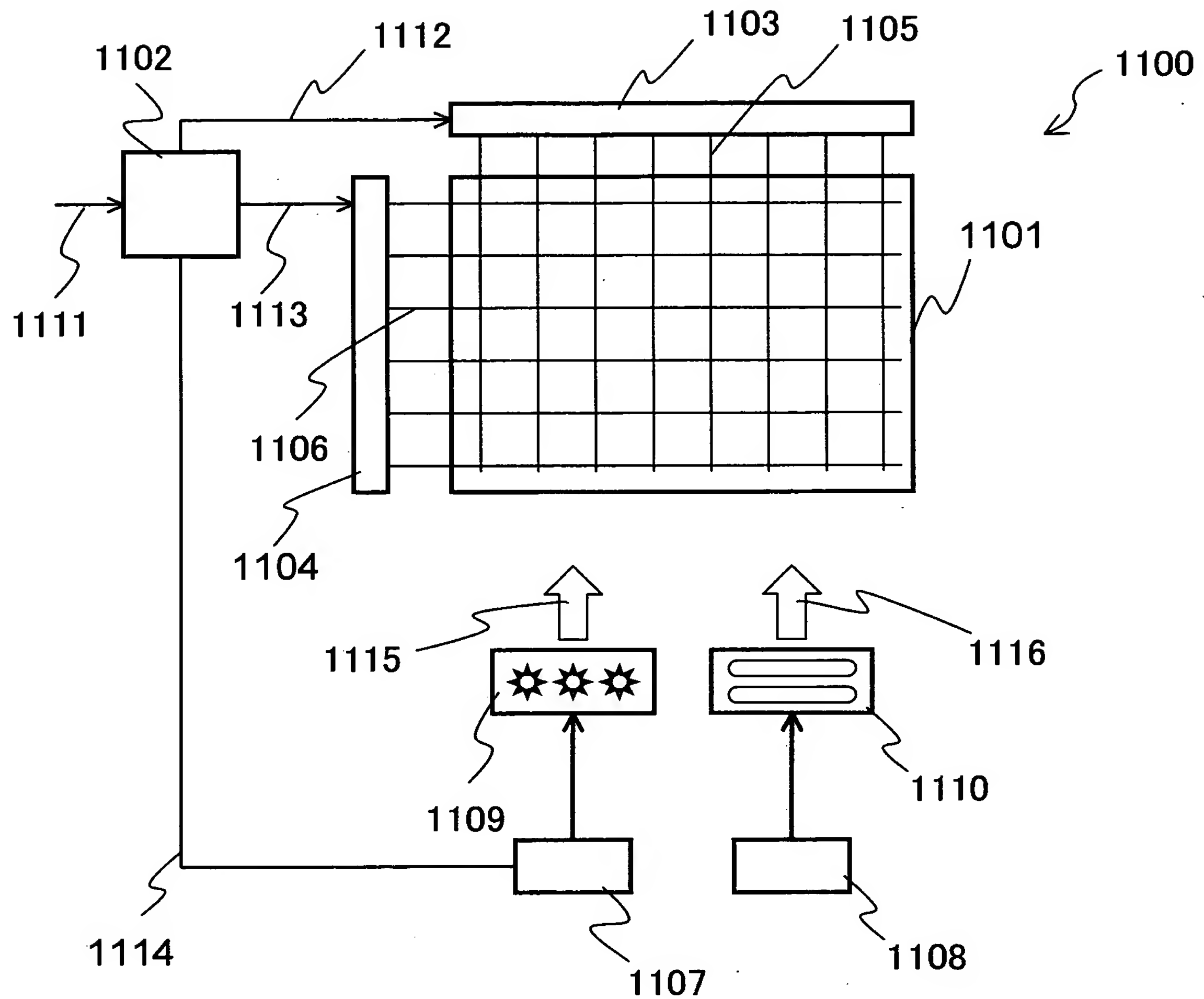


FIG.63

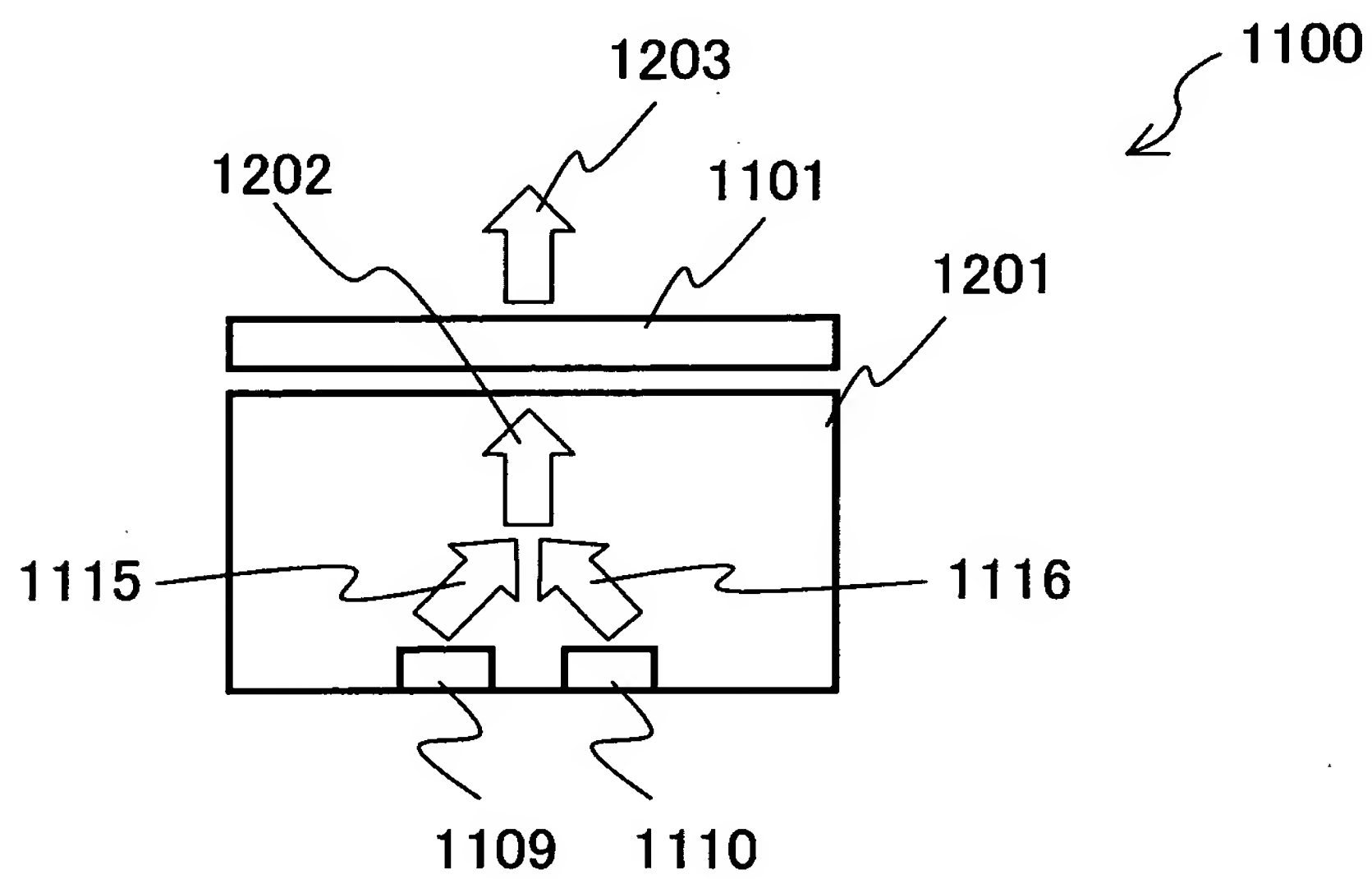


FIG.64 VOLTAGE

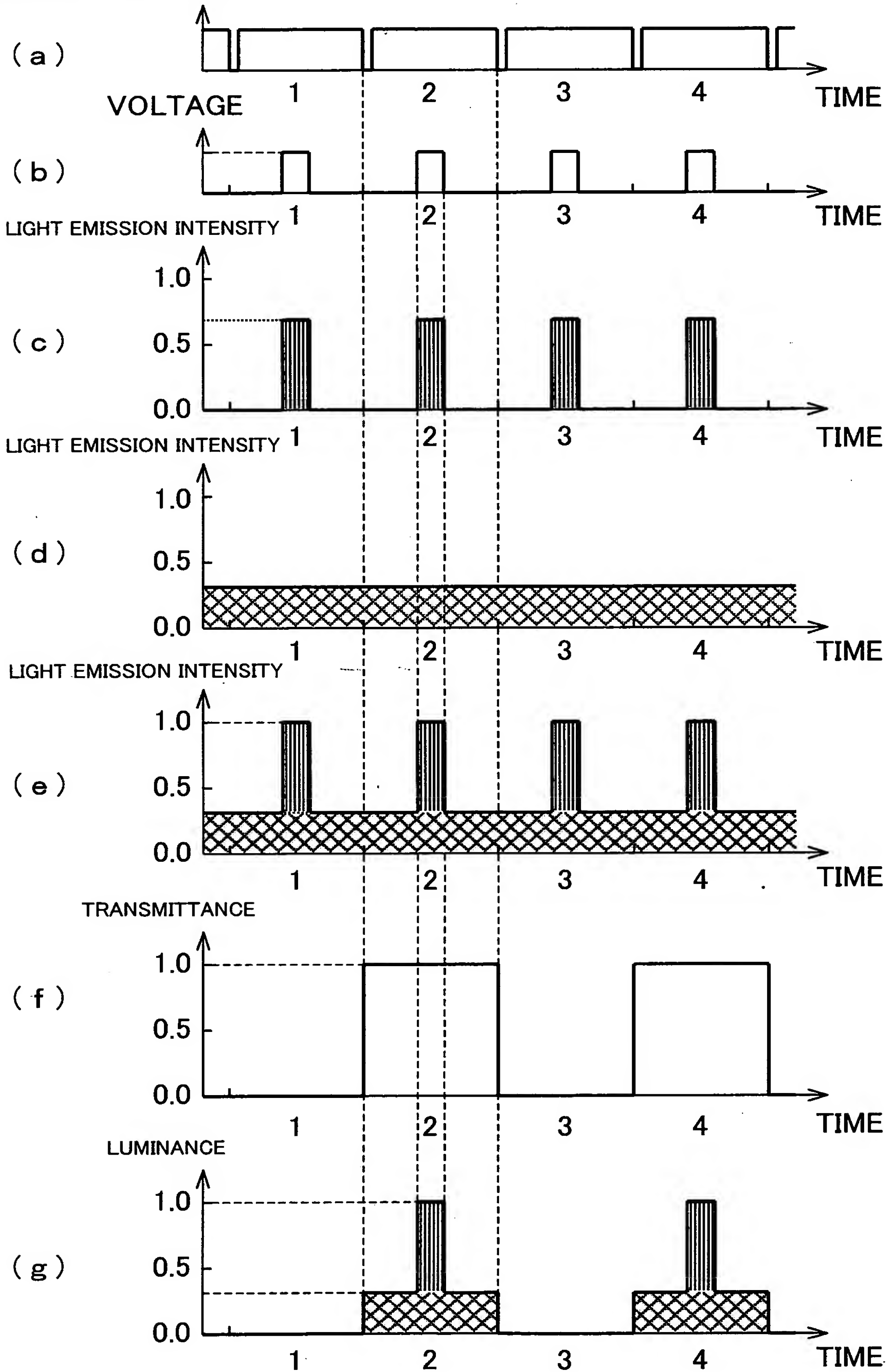


FIG.65

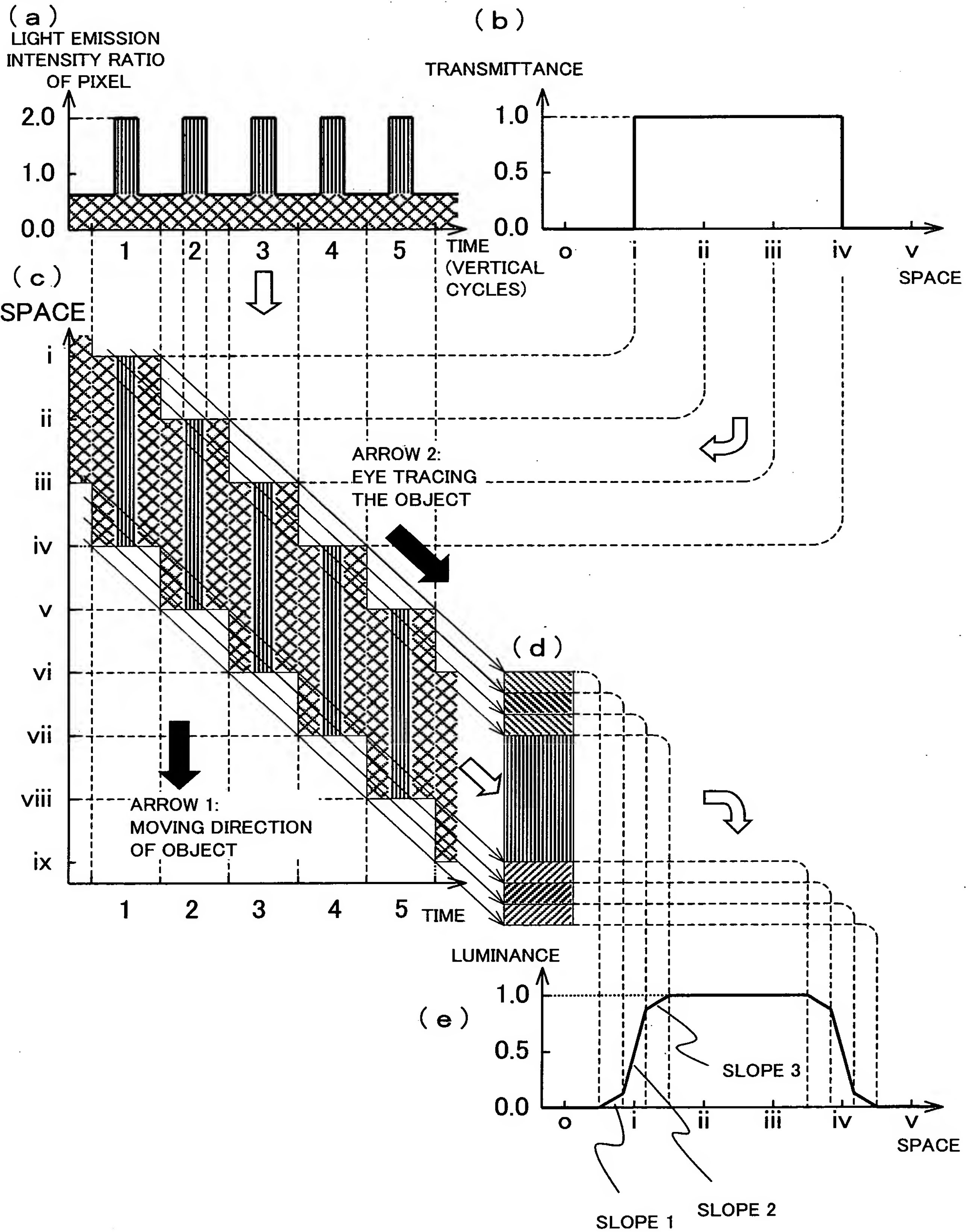


FIG.66(a)

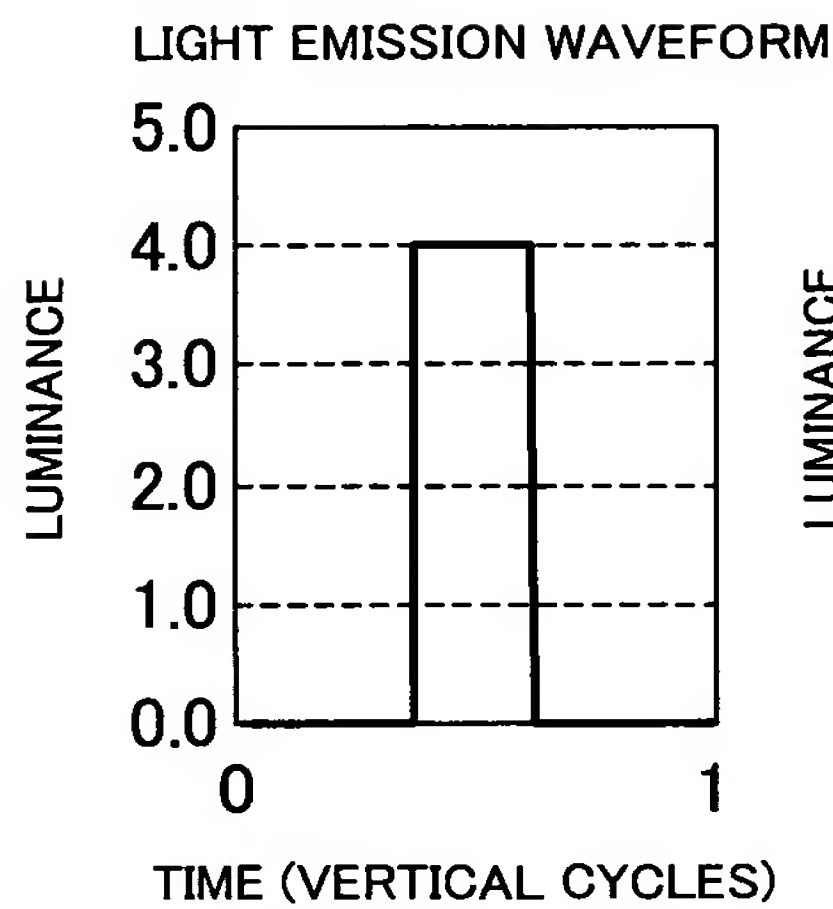


FIG.66(b)

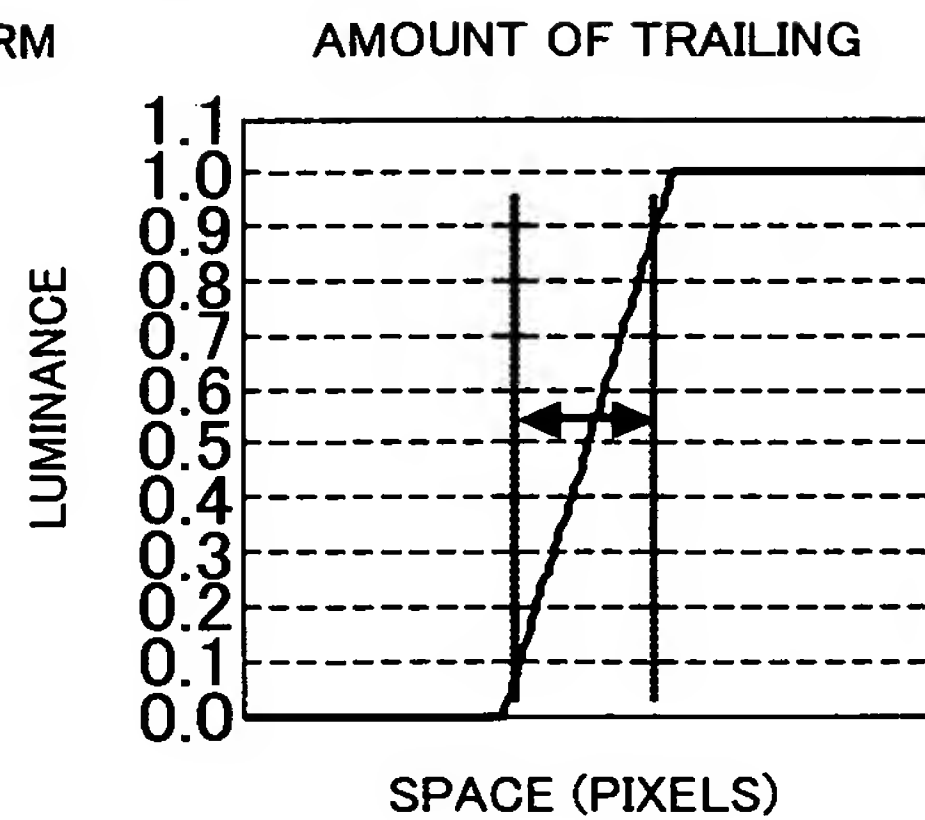


FIG.66(c)

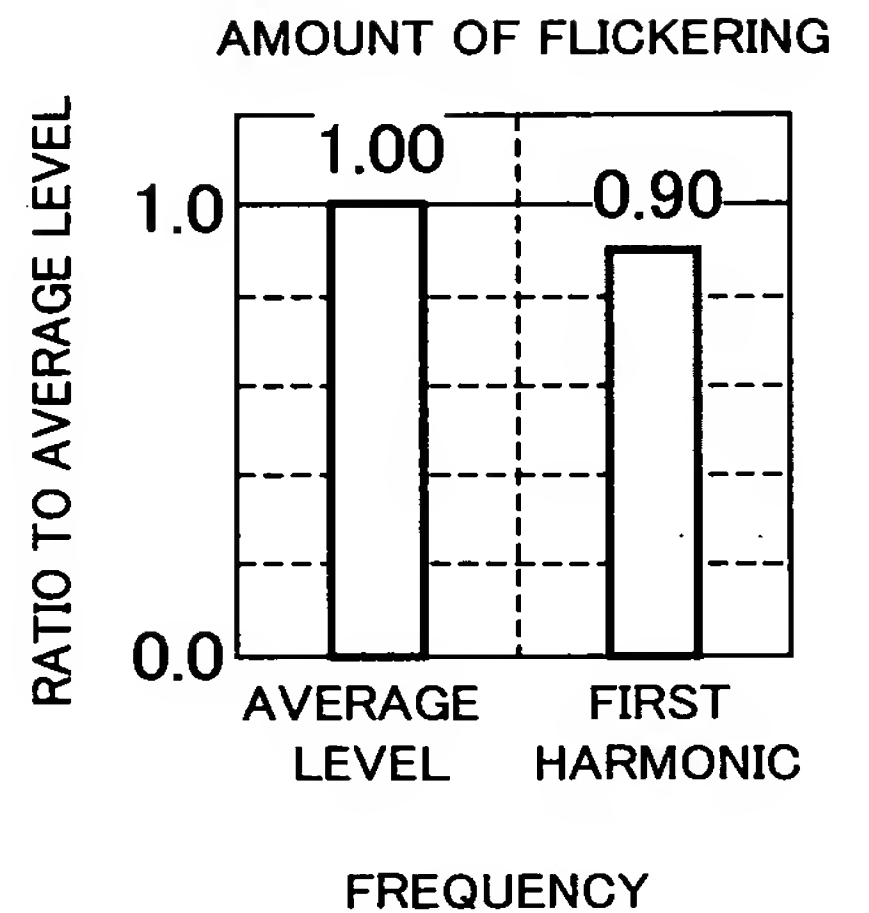


FIG.66(d)

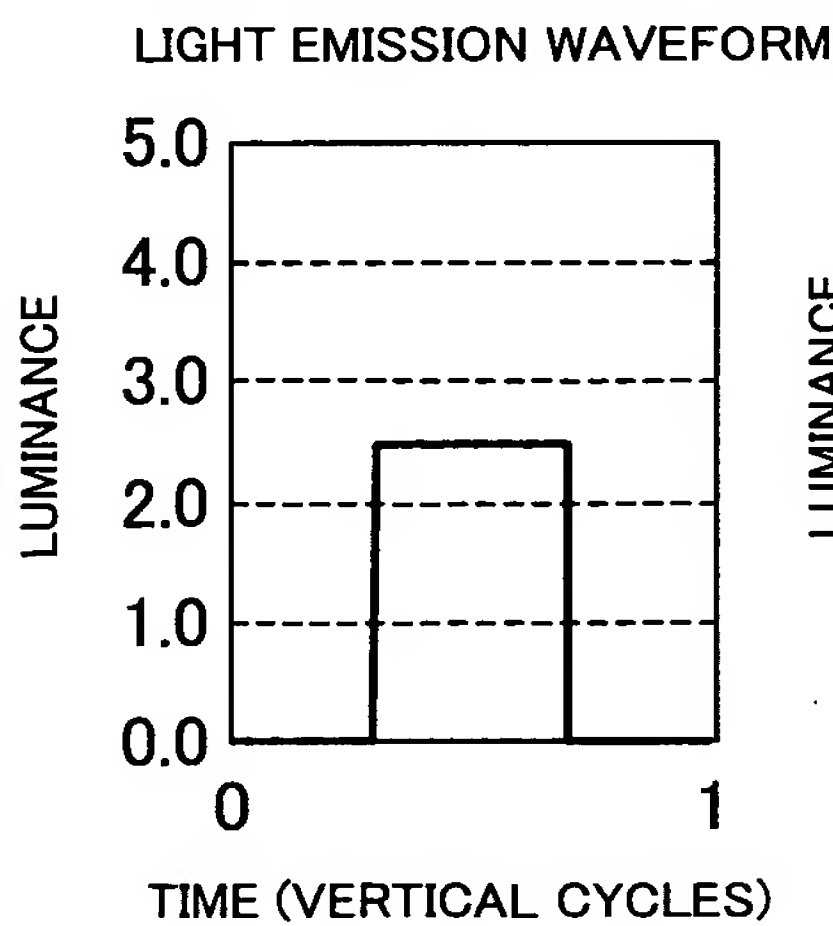


FIG.66(e)

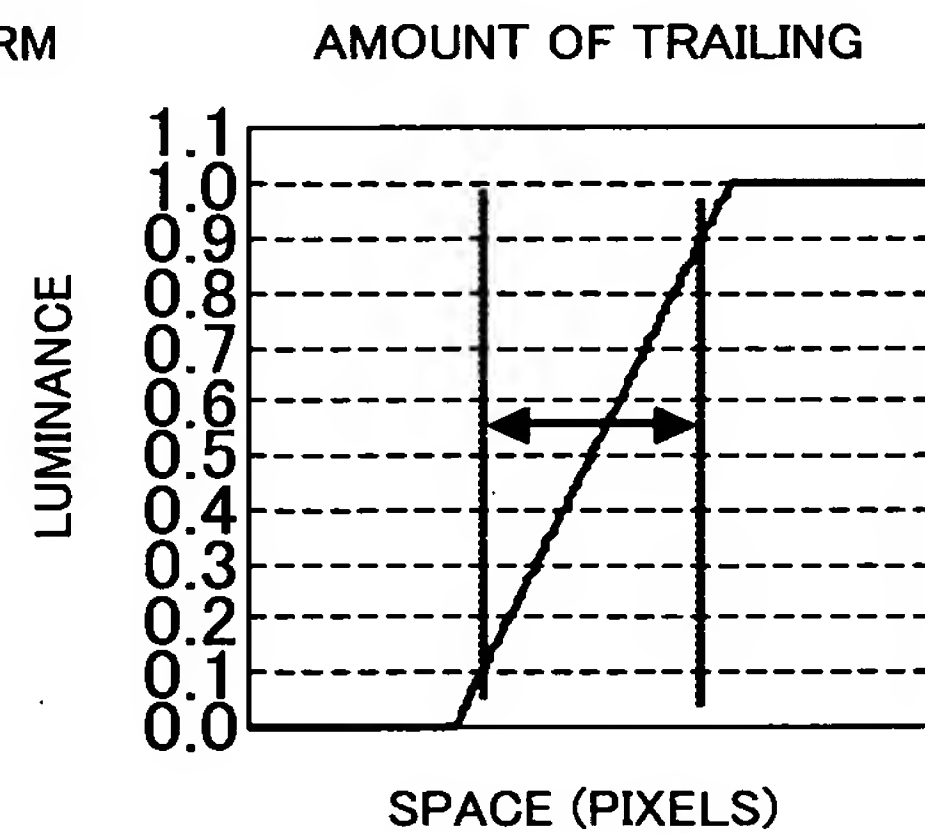


FIG.66(f)

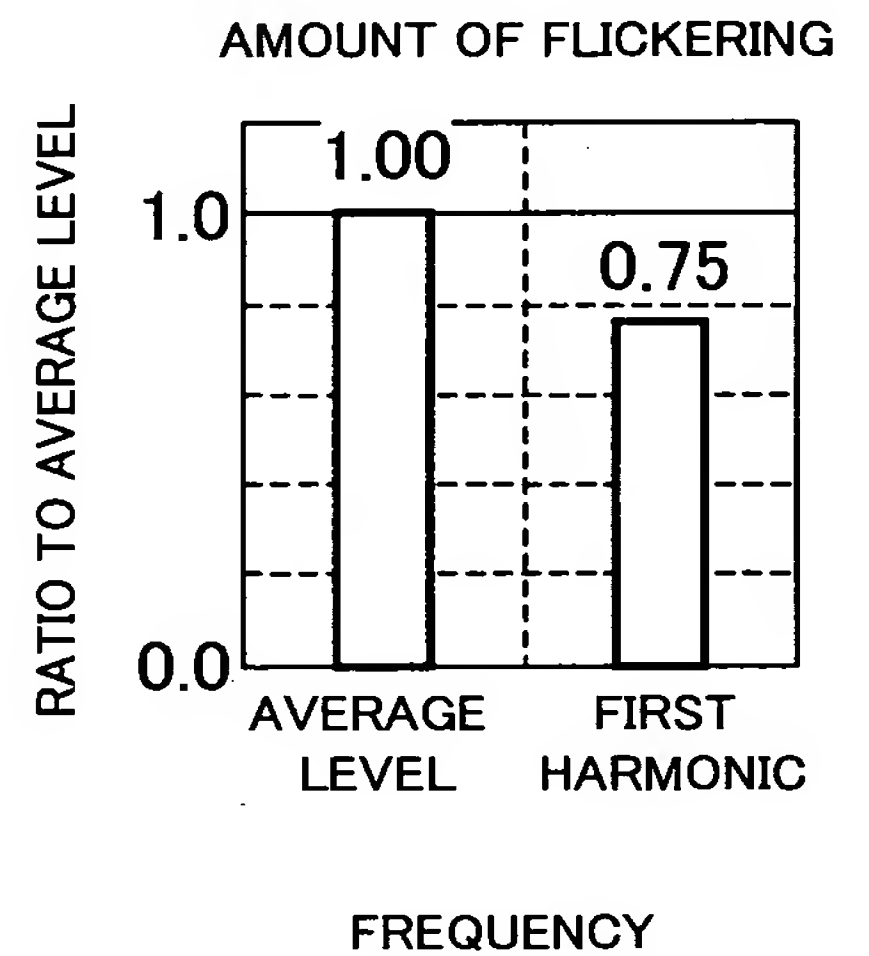


FIG.66(g)

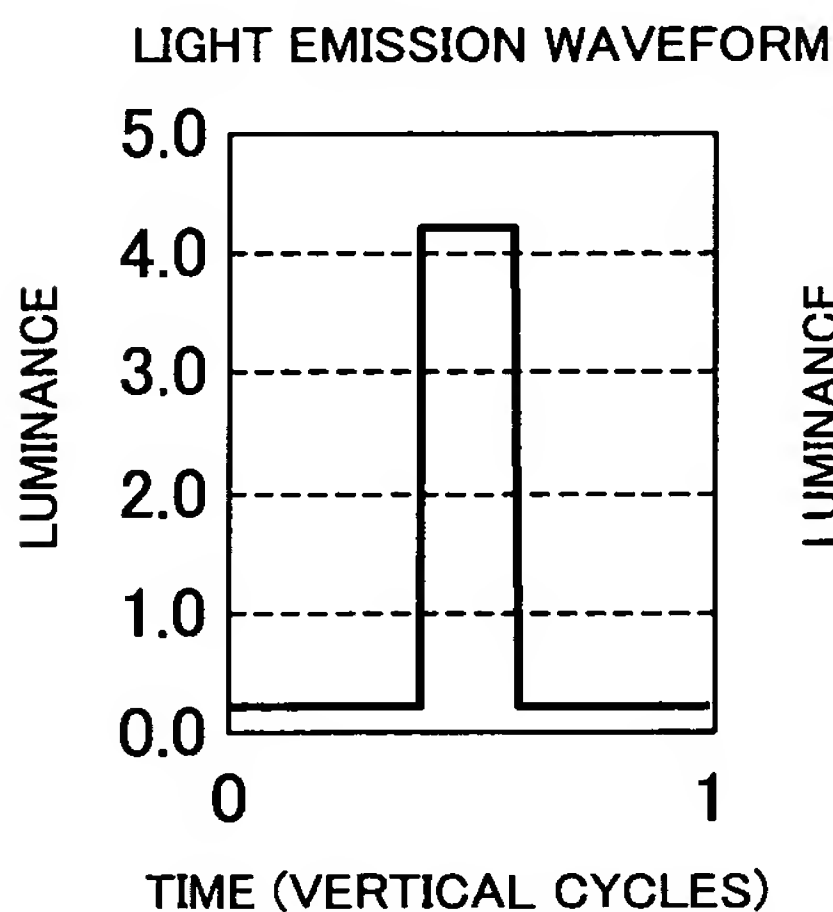


FIG.66(h)

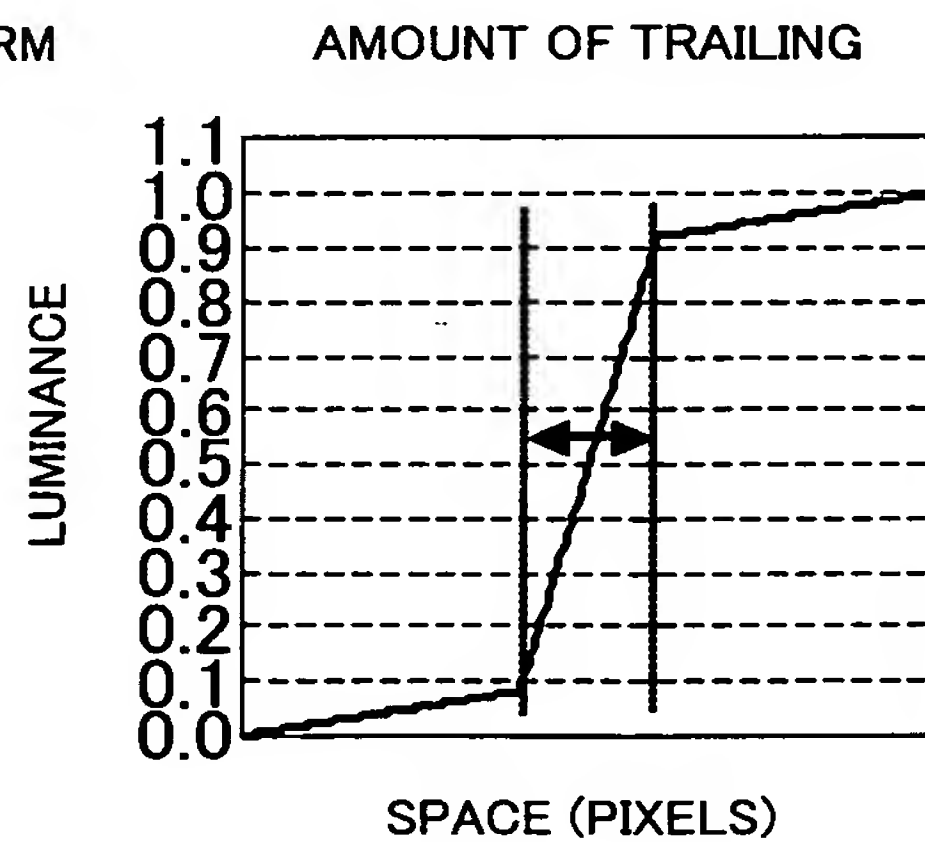


FIG.66(i)

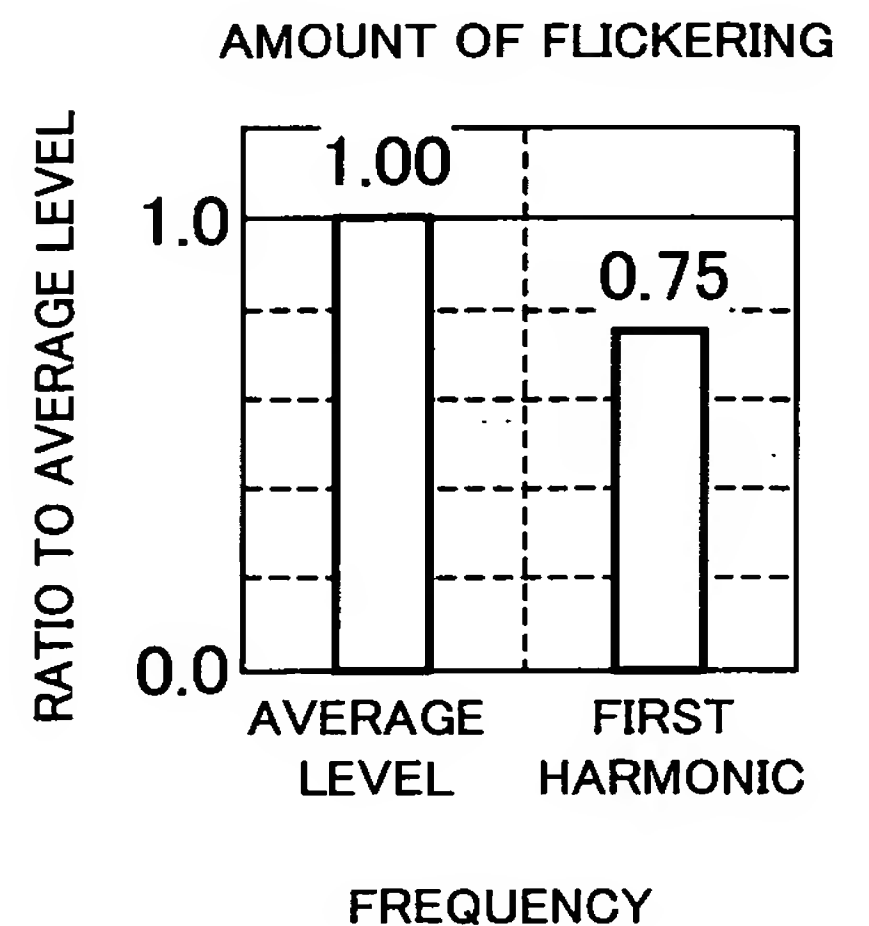


FIG.67

		COL. 1	COL. 2	COL. 3	COL. 4
		DUTY RATIO D (%) OF INTERMITTENT LIGHT EMISSION COMPONENT	LIGHT EMISSION INTENSITY RATIO S1 (%) OF INTERMITTENT LIGHT EMISSION COMPONENT	AMOUNT OF TRAILING [PIXEL]	AMOUNT OF FLICKERING [%]
ROW 1	CONVENTIONAL EX.	25	100	0.20	90
ROW 2	CONVENTIONAL EX.	40	100	0.32	75
ROW 3	PRESENT EMBODIMENT	20	80	0.20	75

FIG.68

RELATIONSHIP BETWEEN AMOUNTS OF TRAILING AND FLICKERING

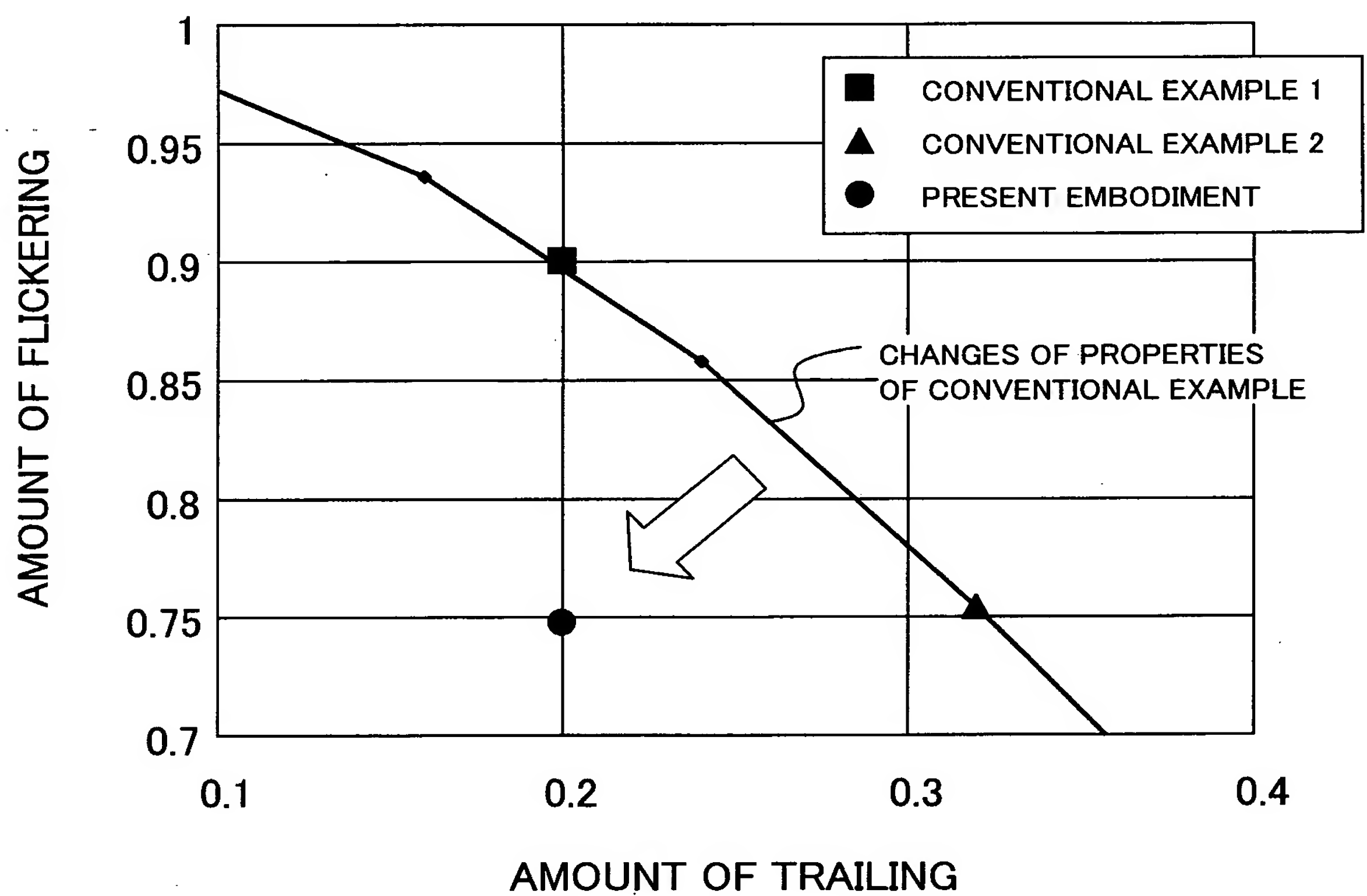


FIG.69(a)

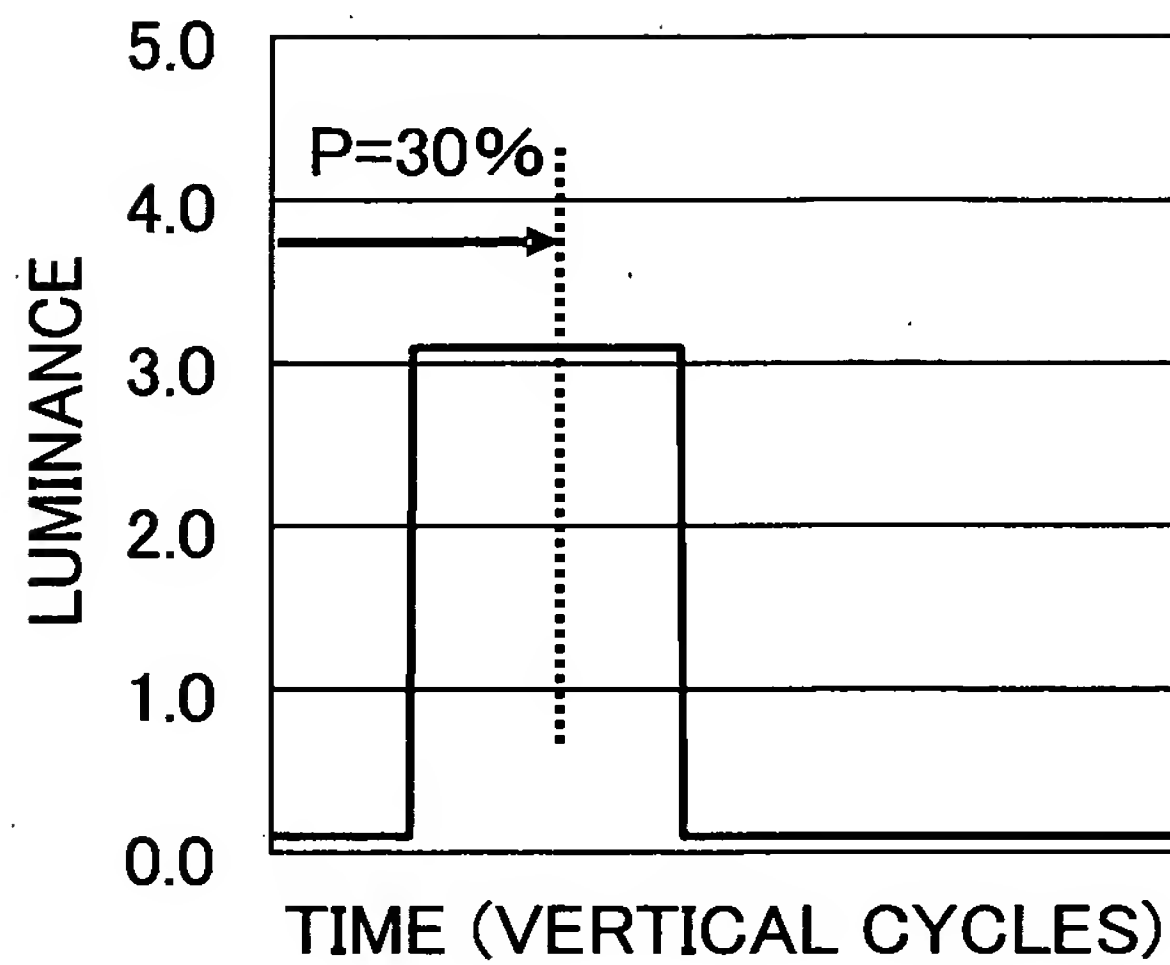


FIG.69(b)

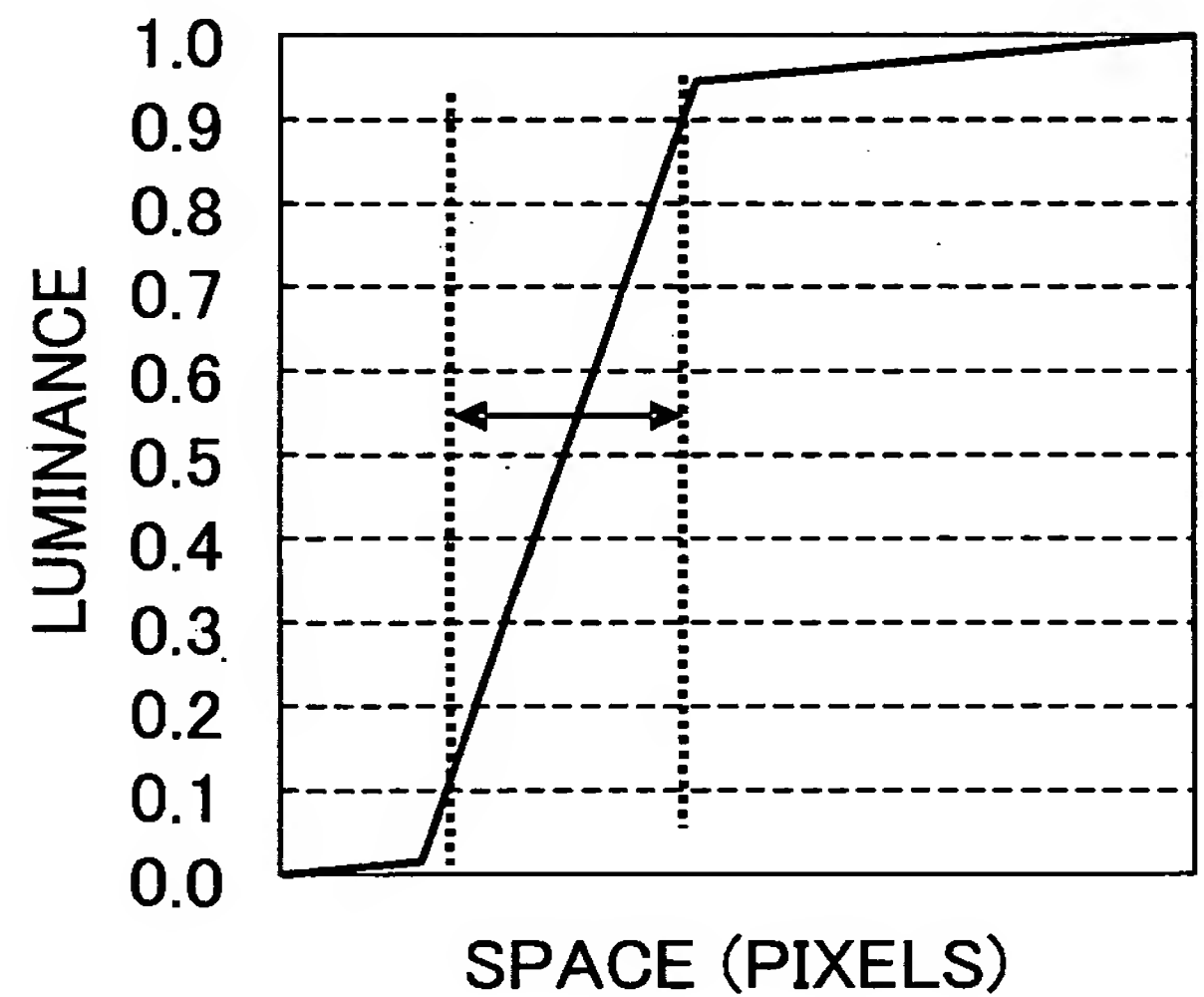


FIG.69(c)

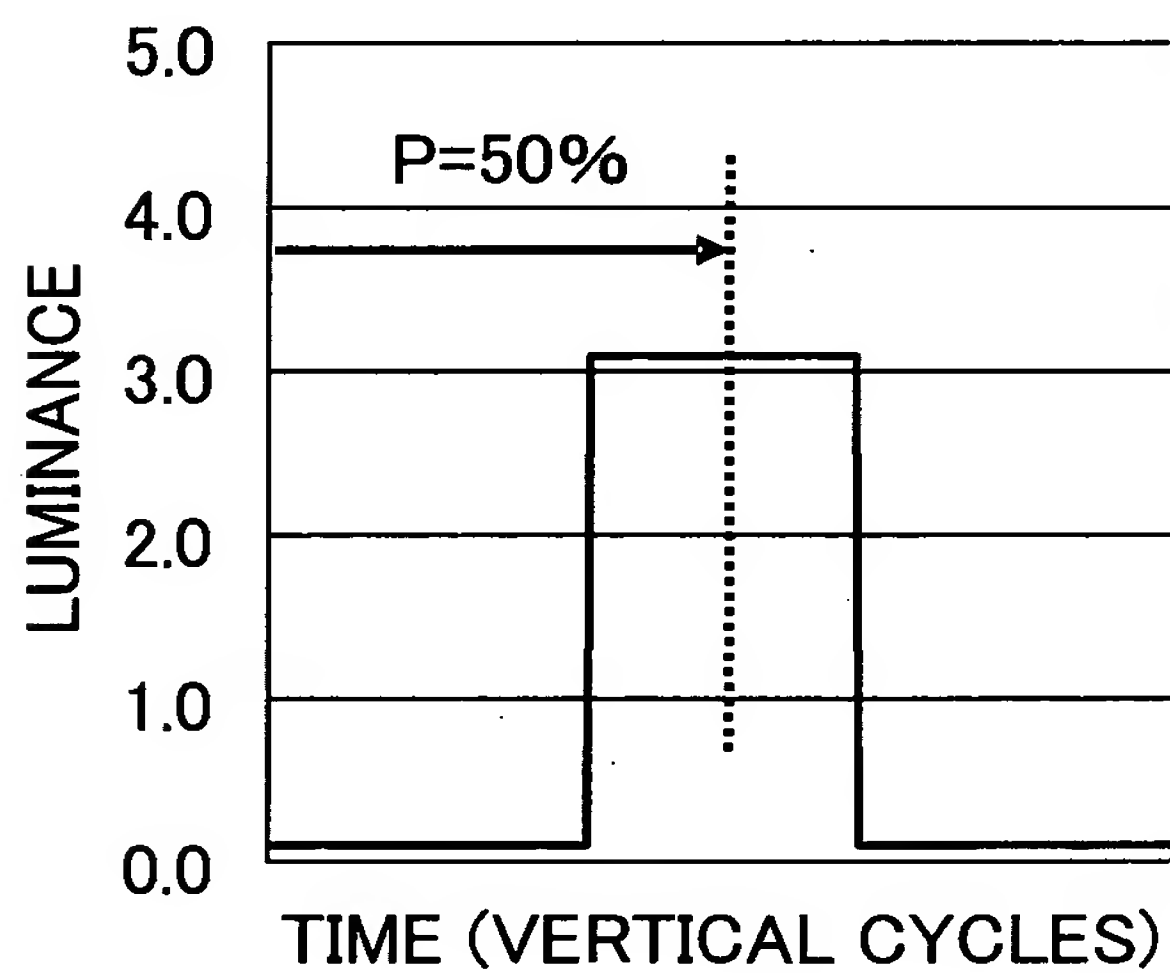


FIG.69(d)

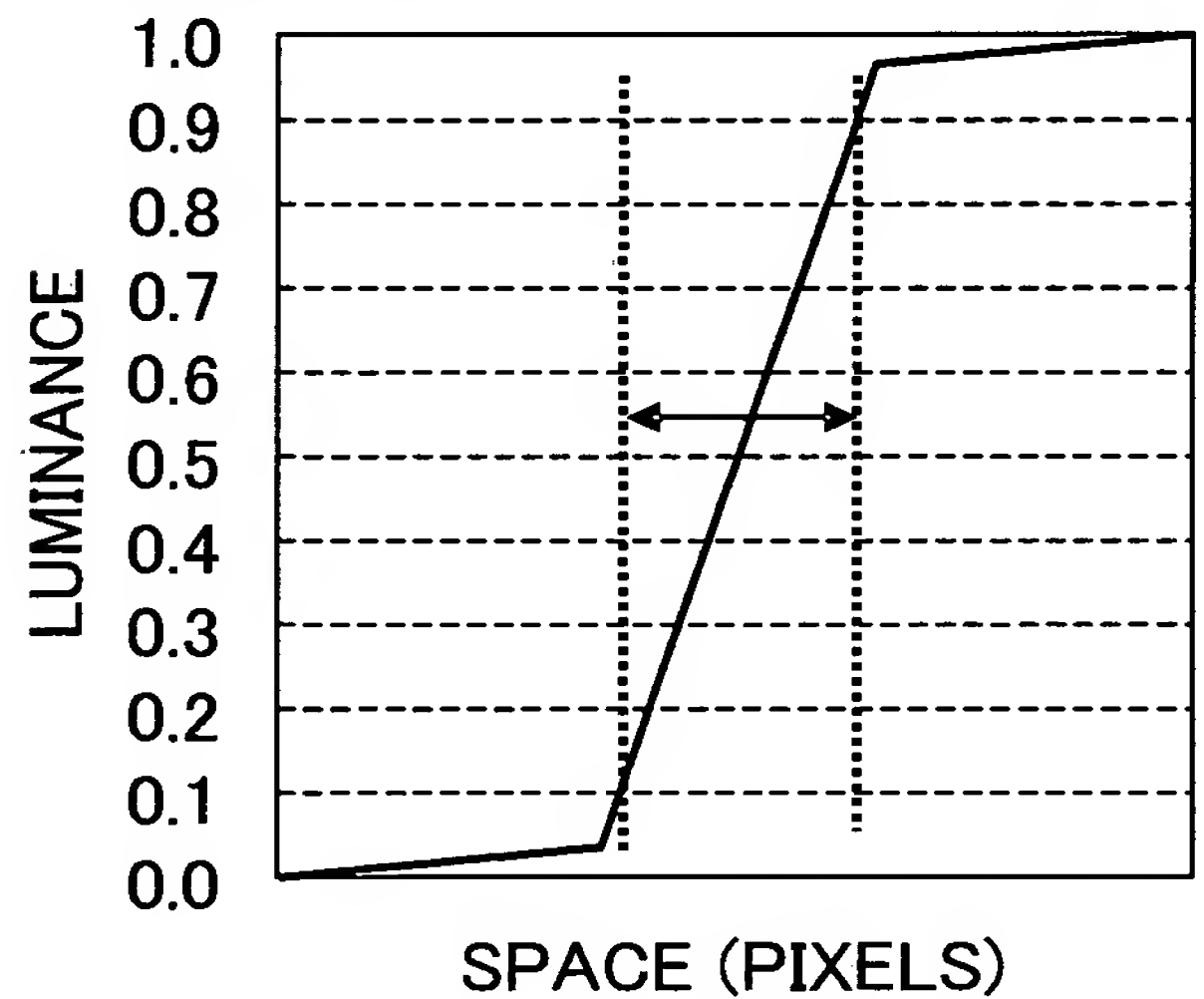


FIG.69(e)

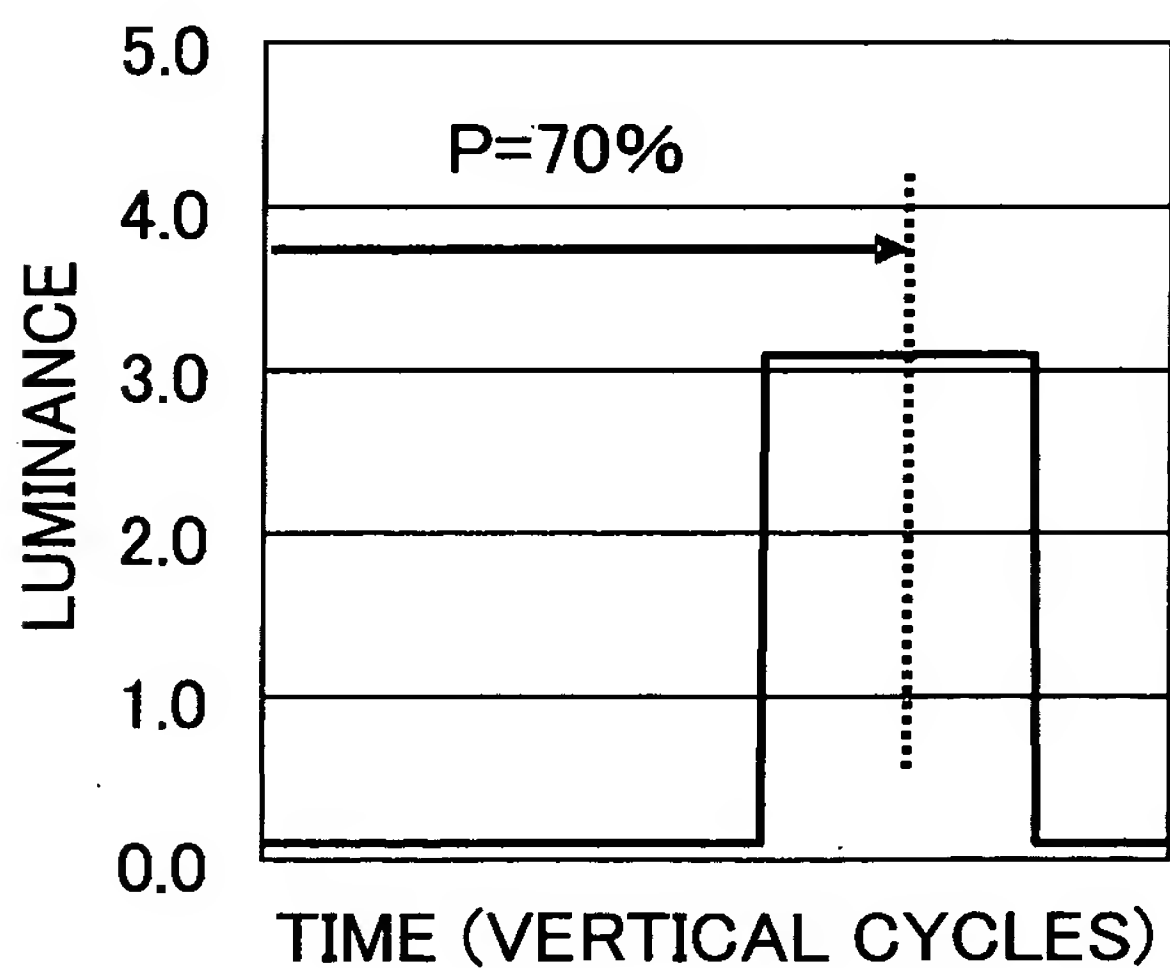


FIG.69(f)

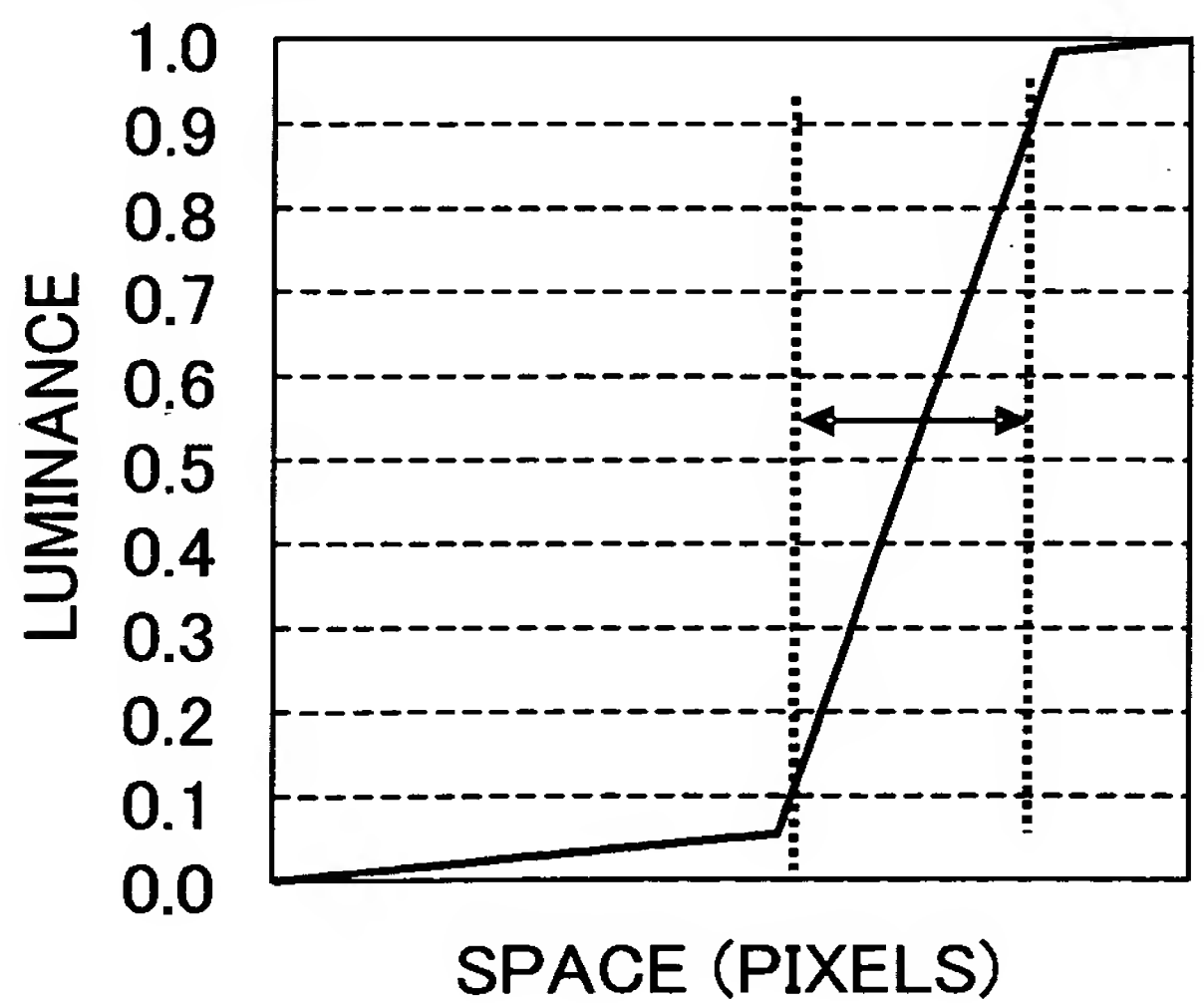


FIG.70(a)

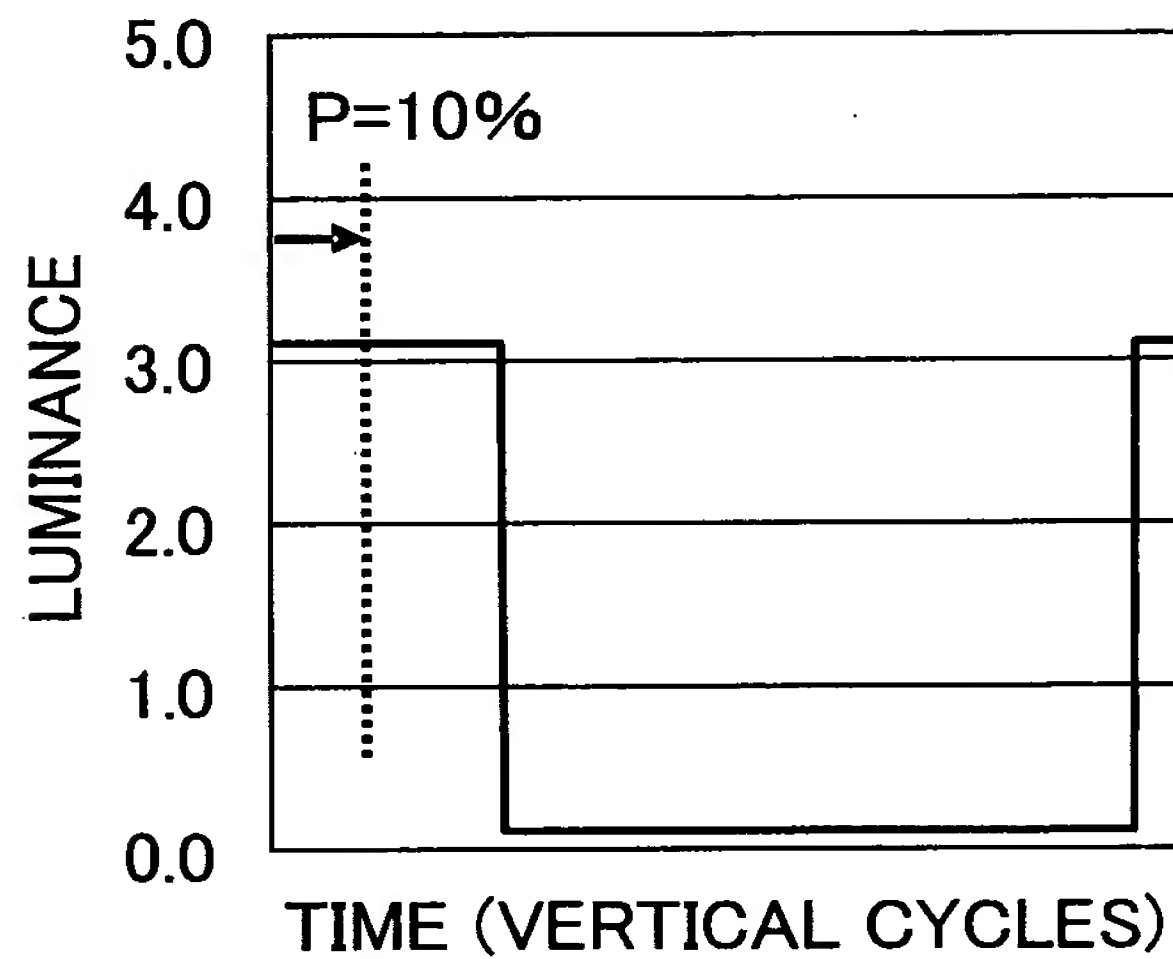


FIG.70(b)

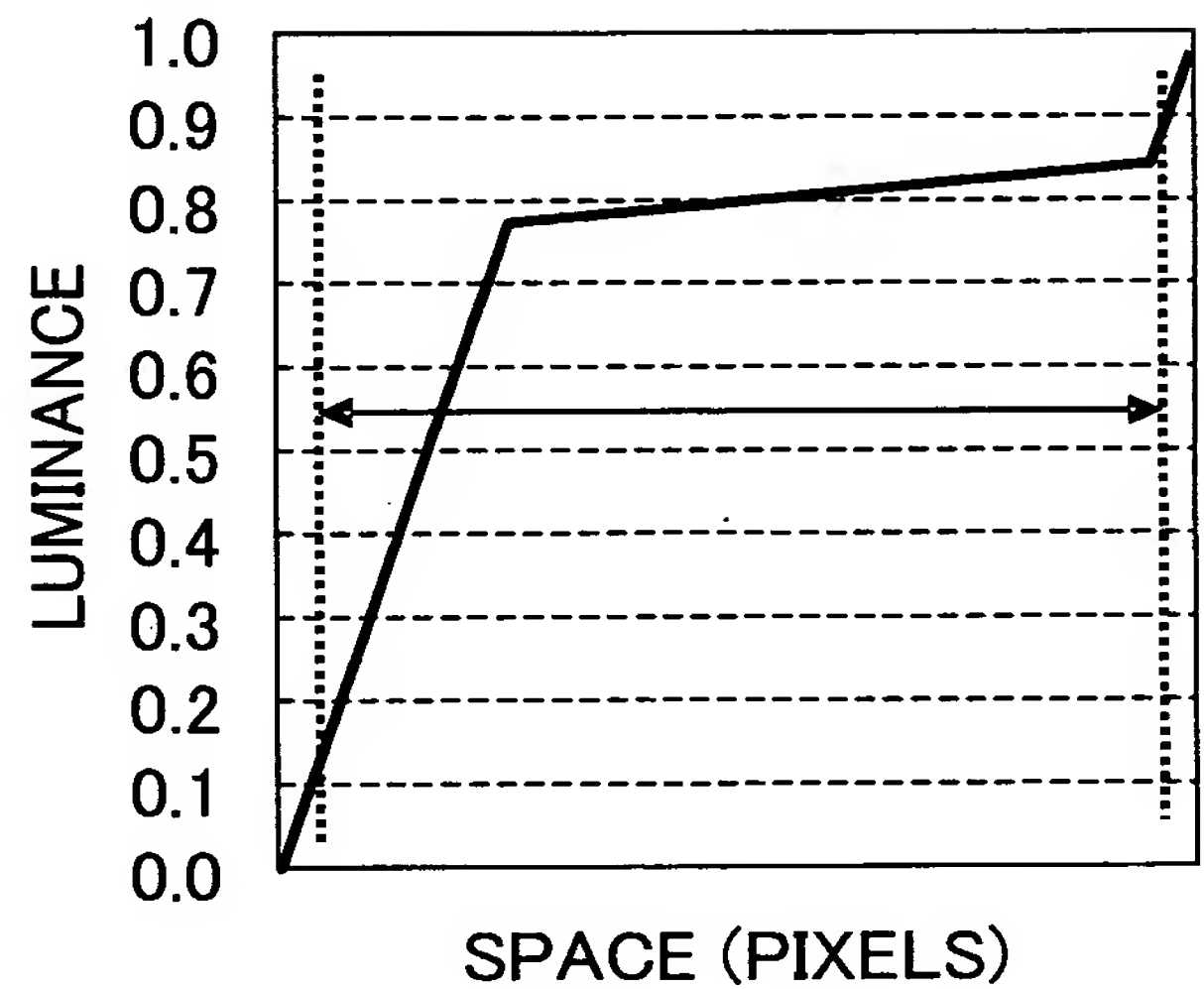


FIG.70(c)

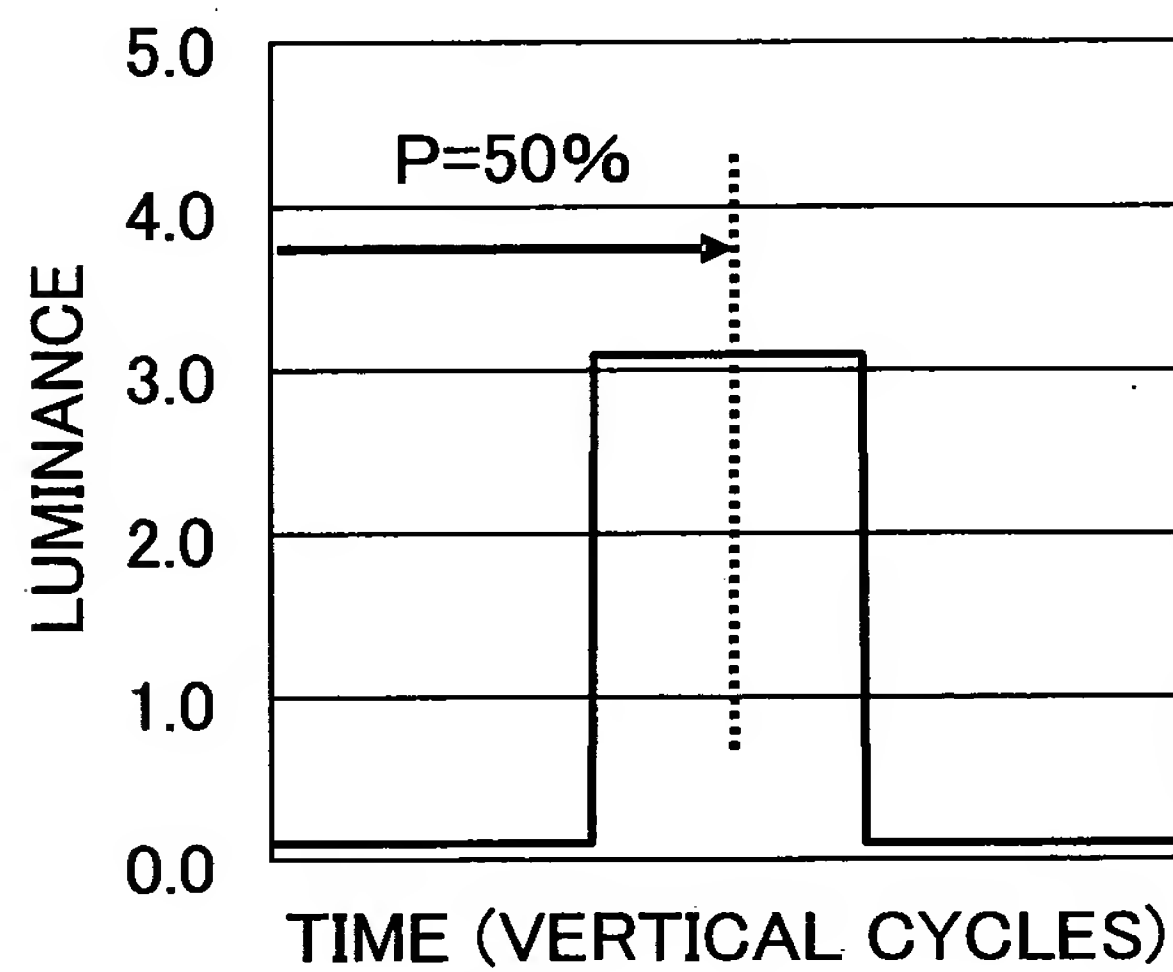


FIG.70(d)

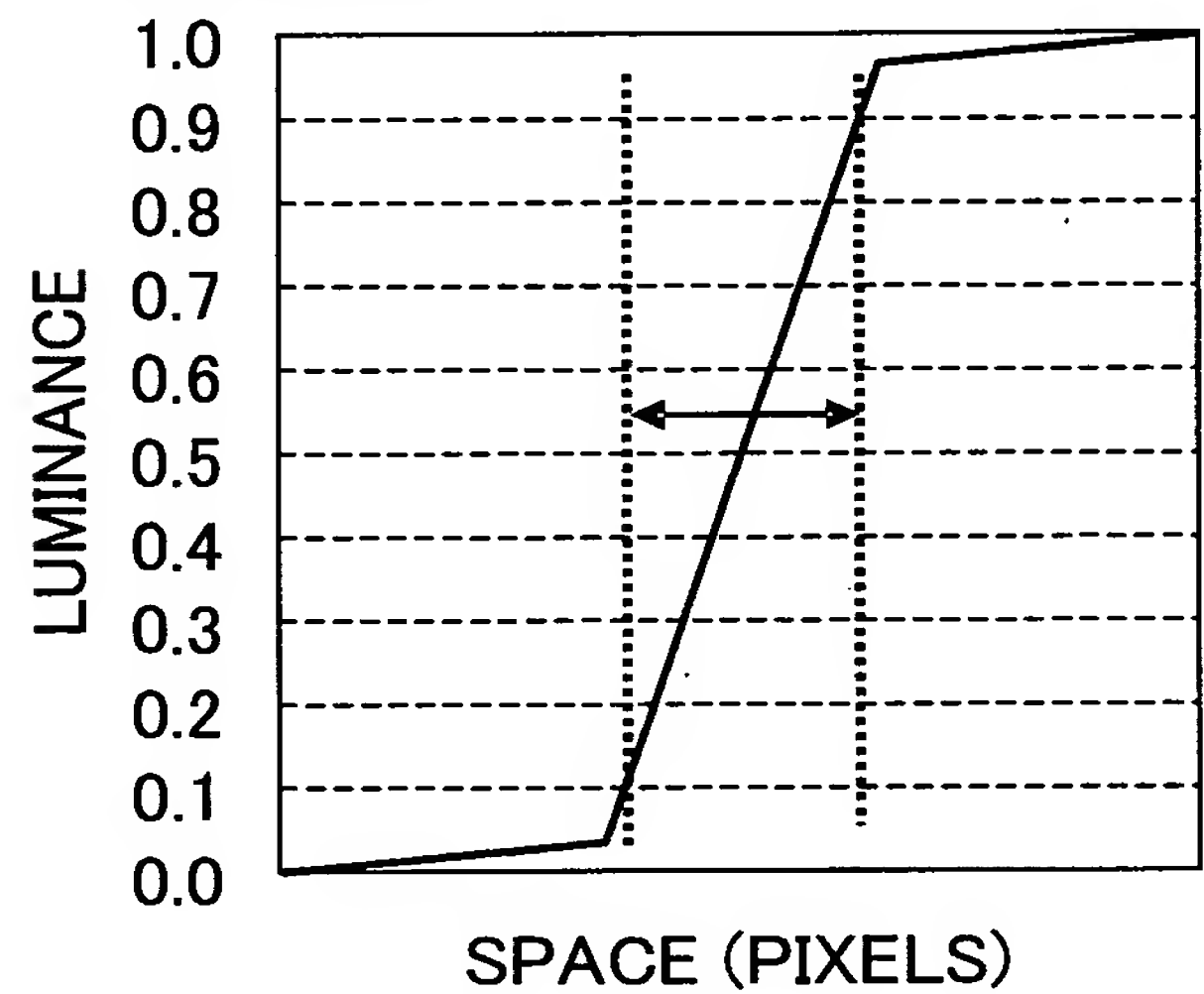


FIG.70(e)

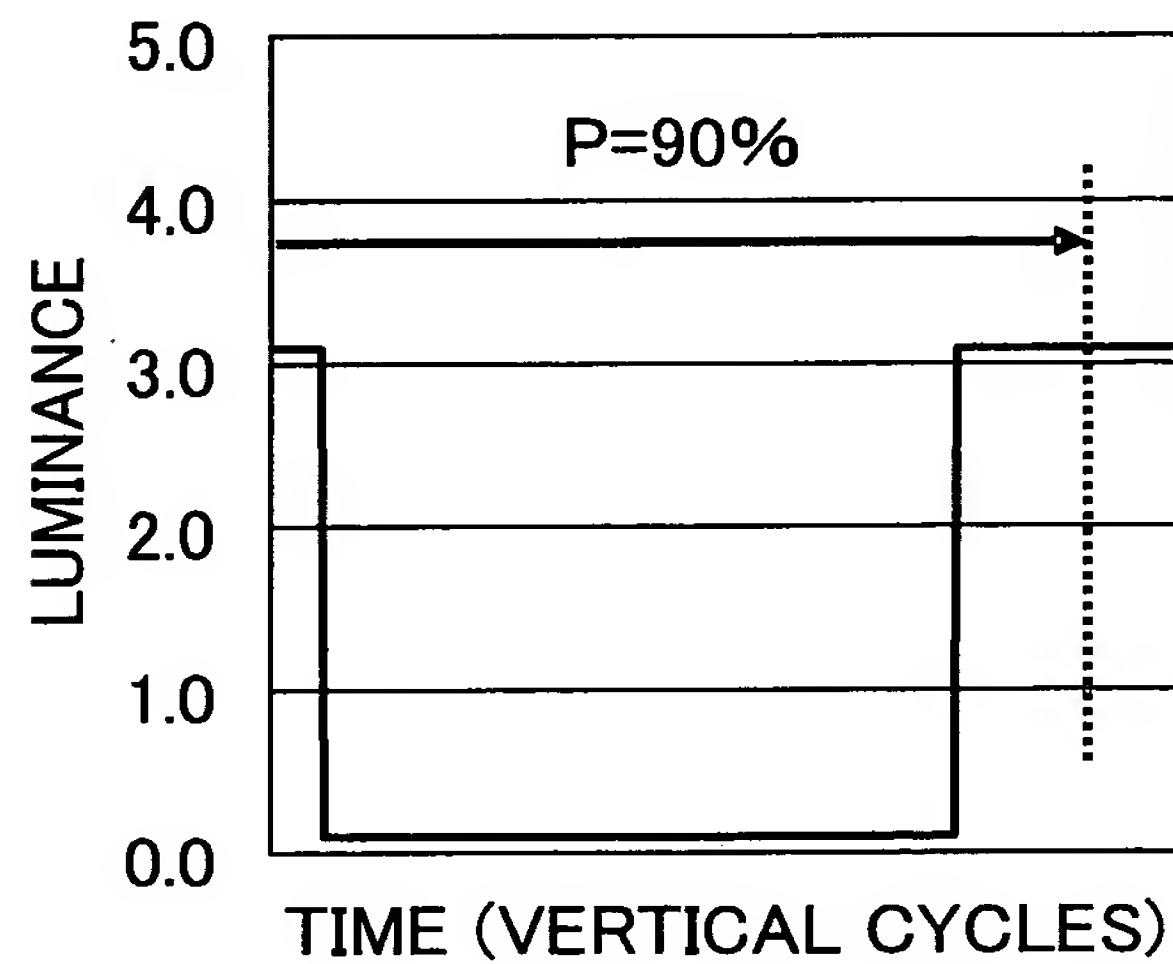


FIG.70(f)

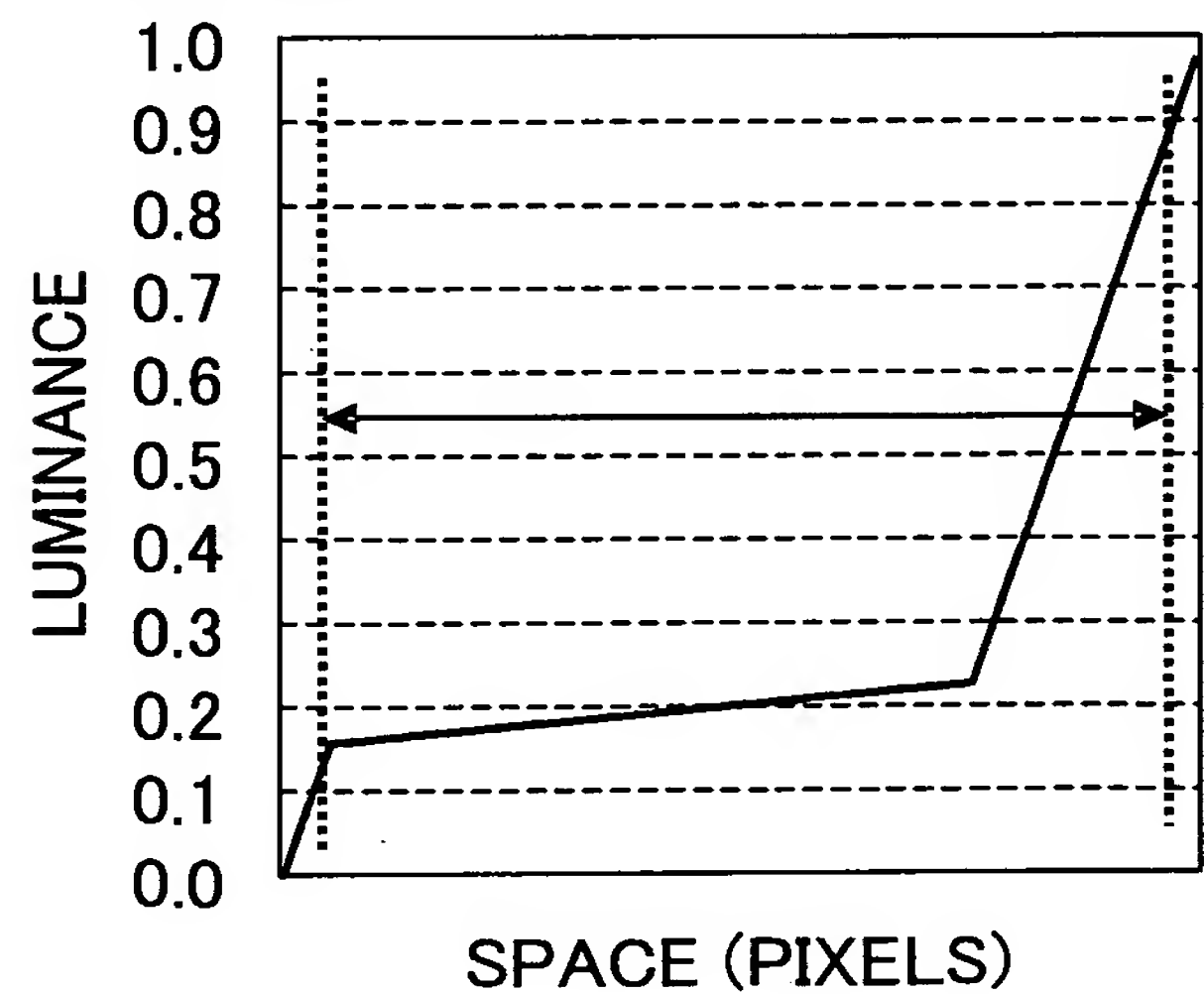


FIG.71 (a)

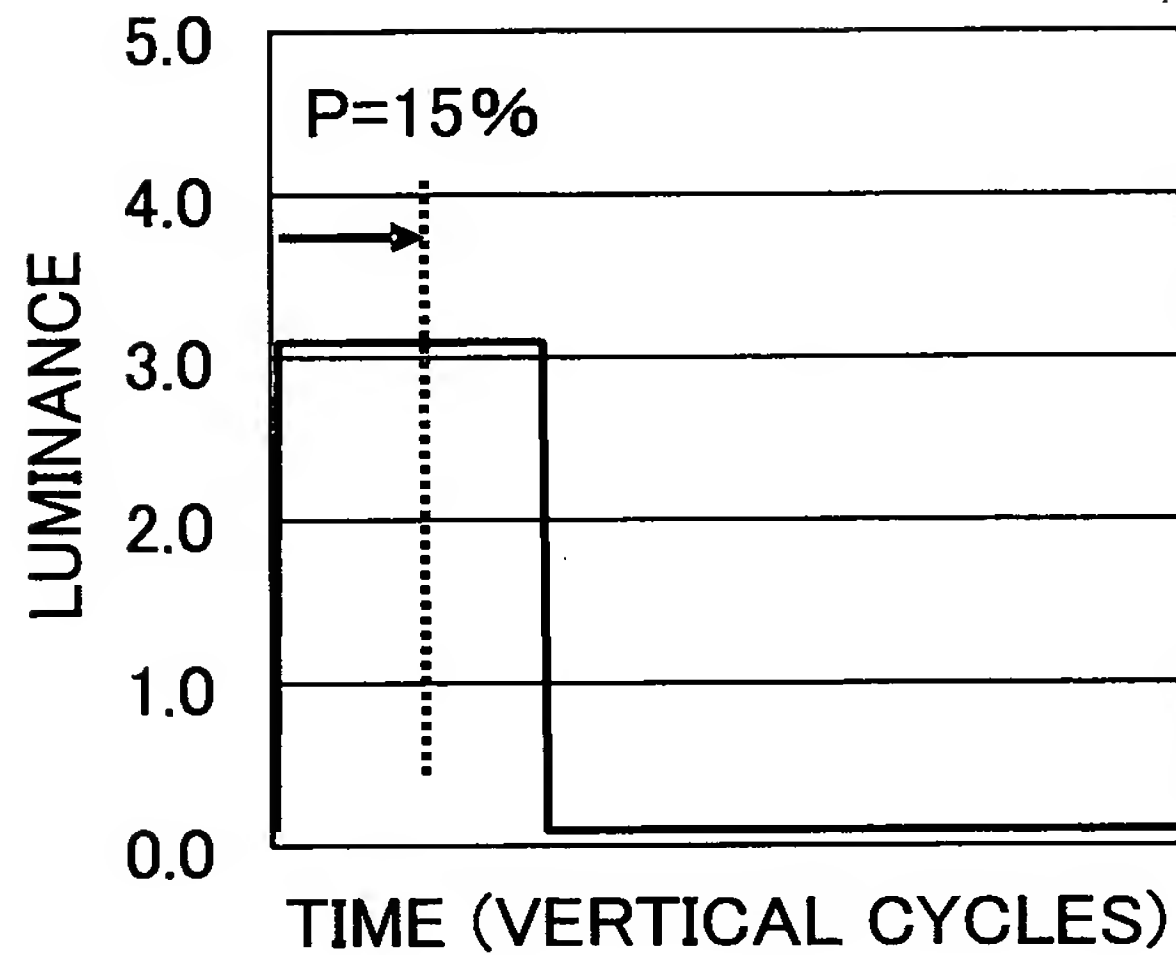


FIG.71 (b)

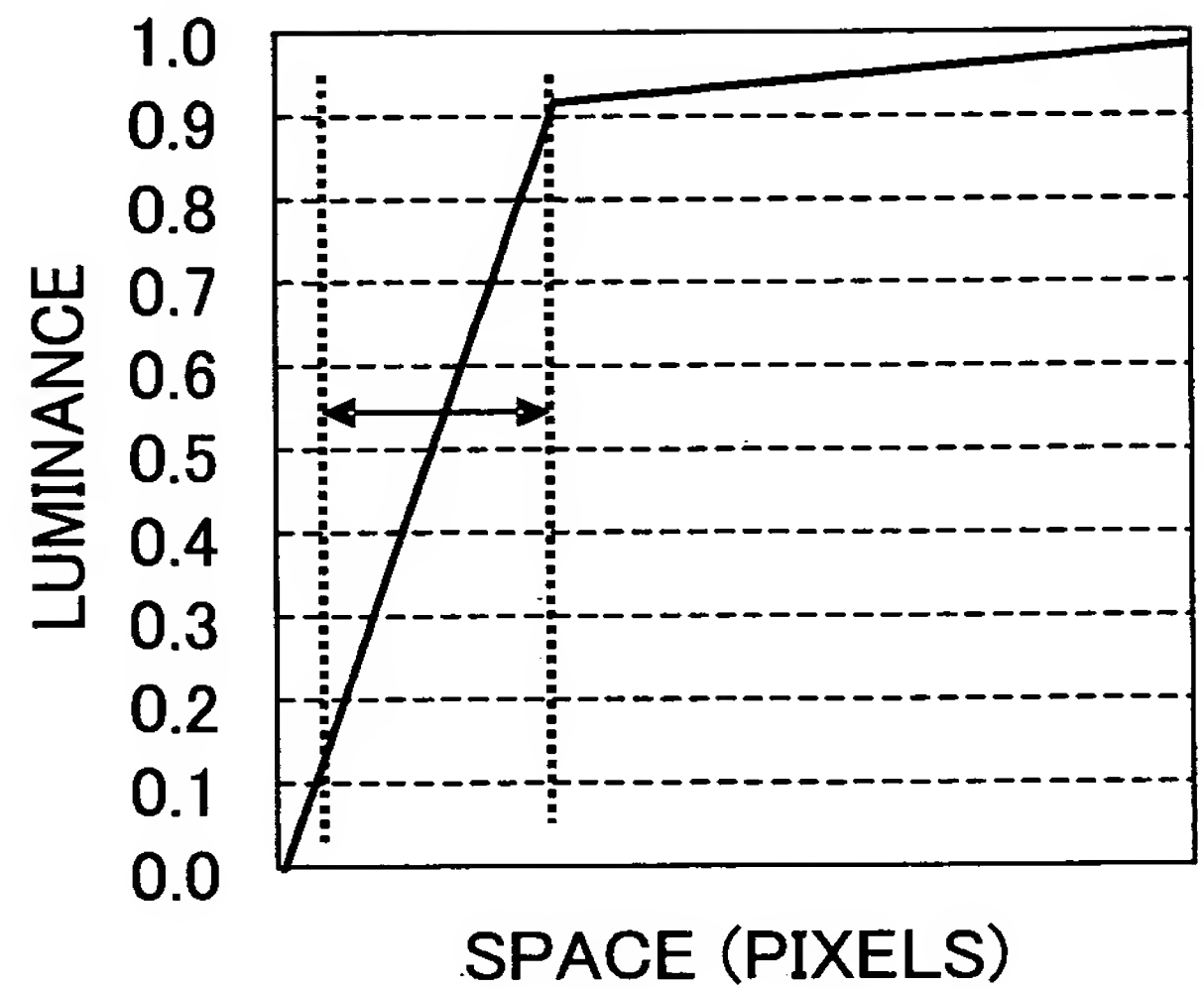


FIG.71 (c)

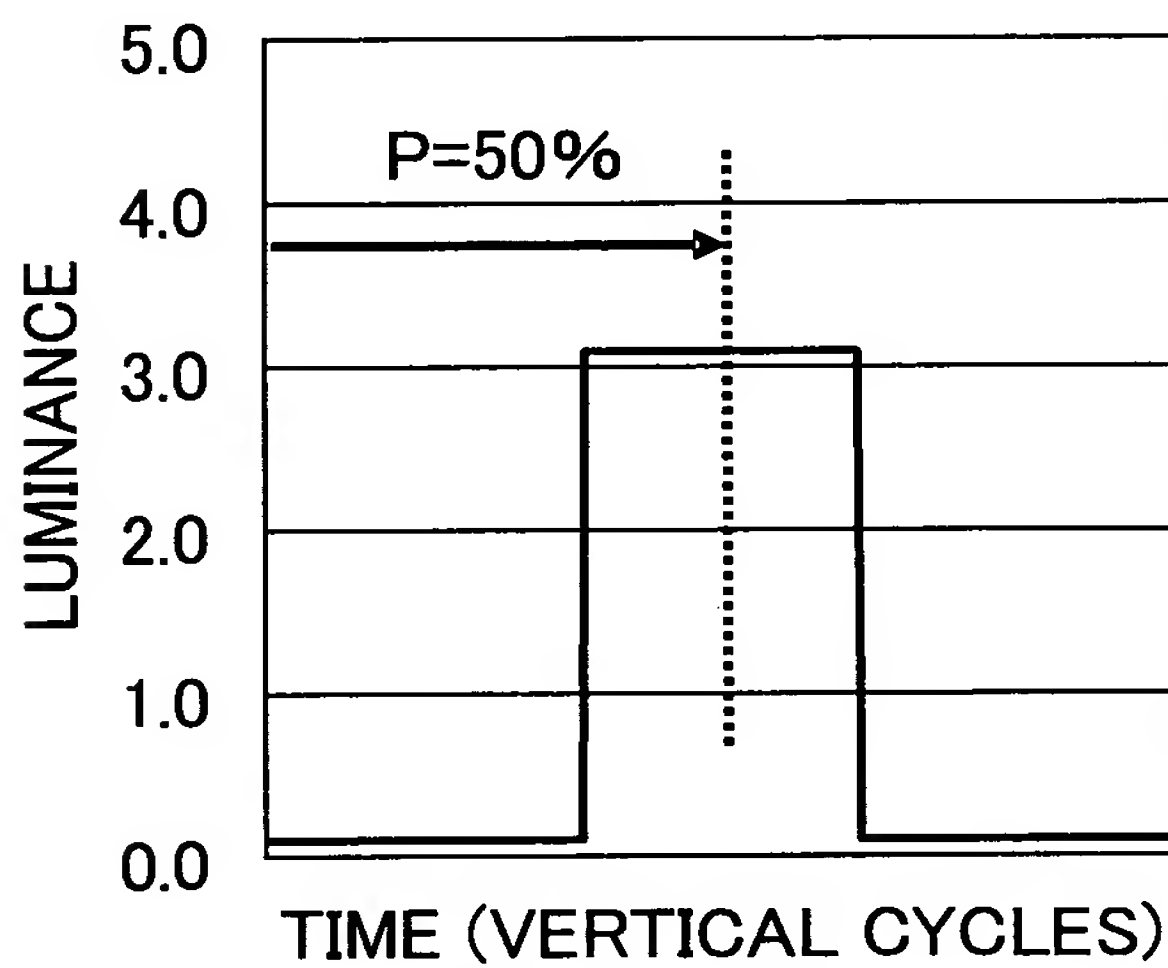


FIG.71 (d)

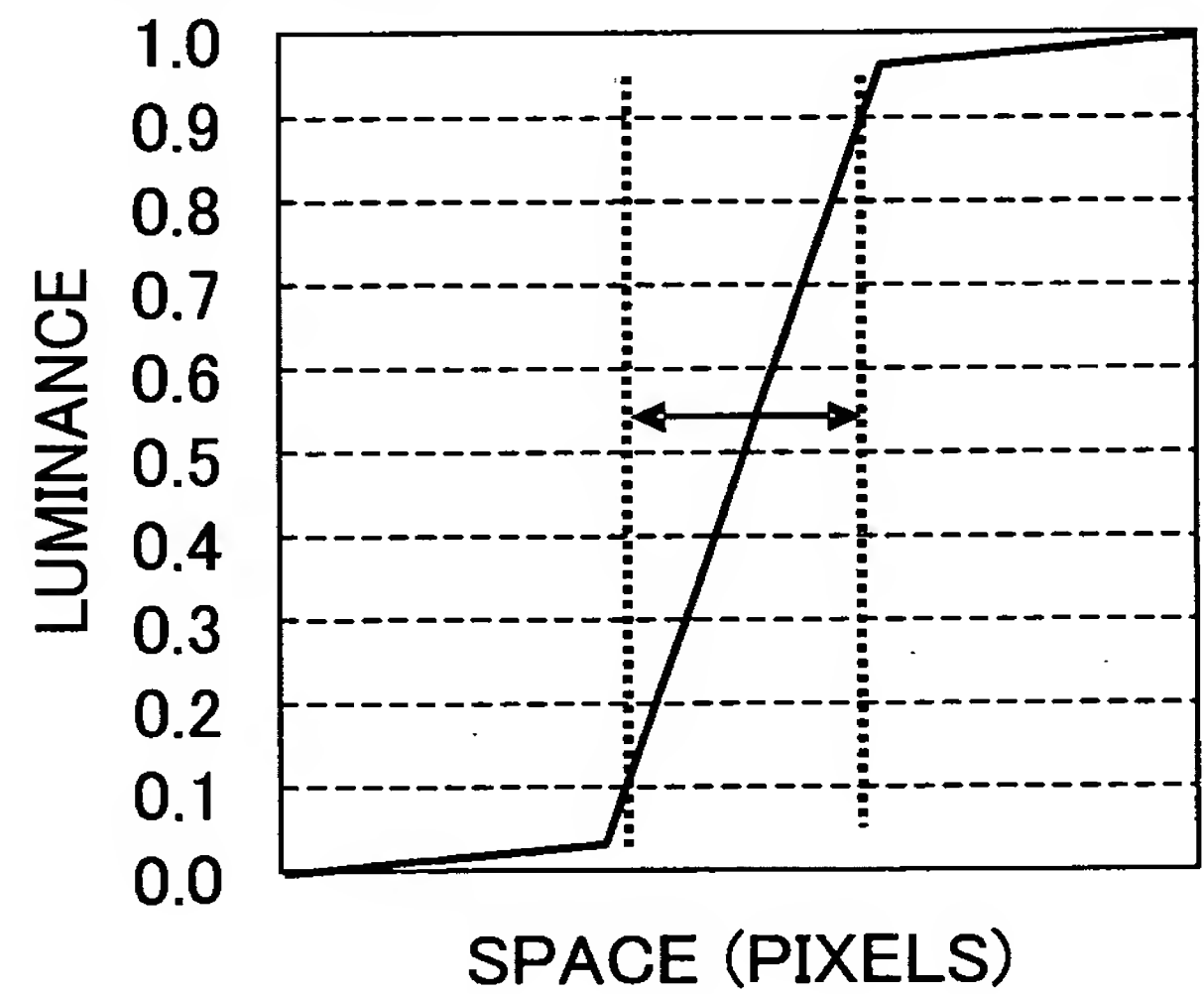


FIG.71 (e)

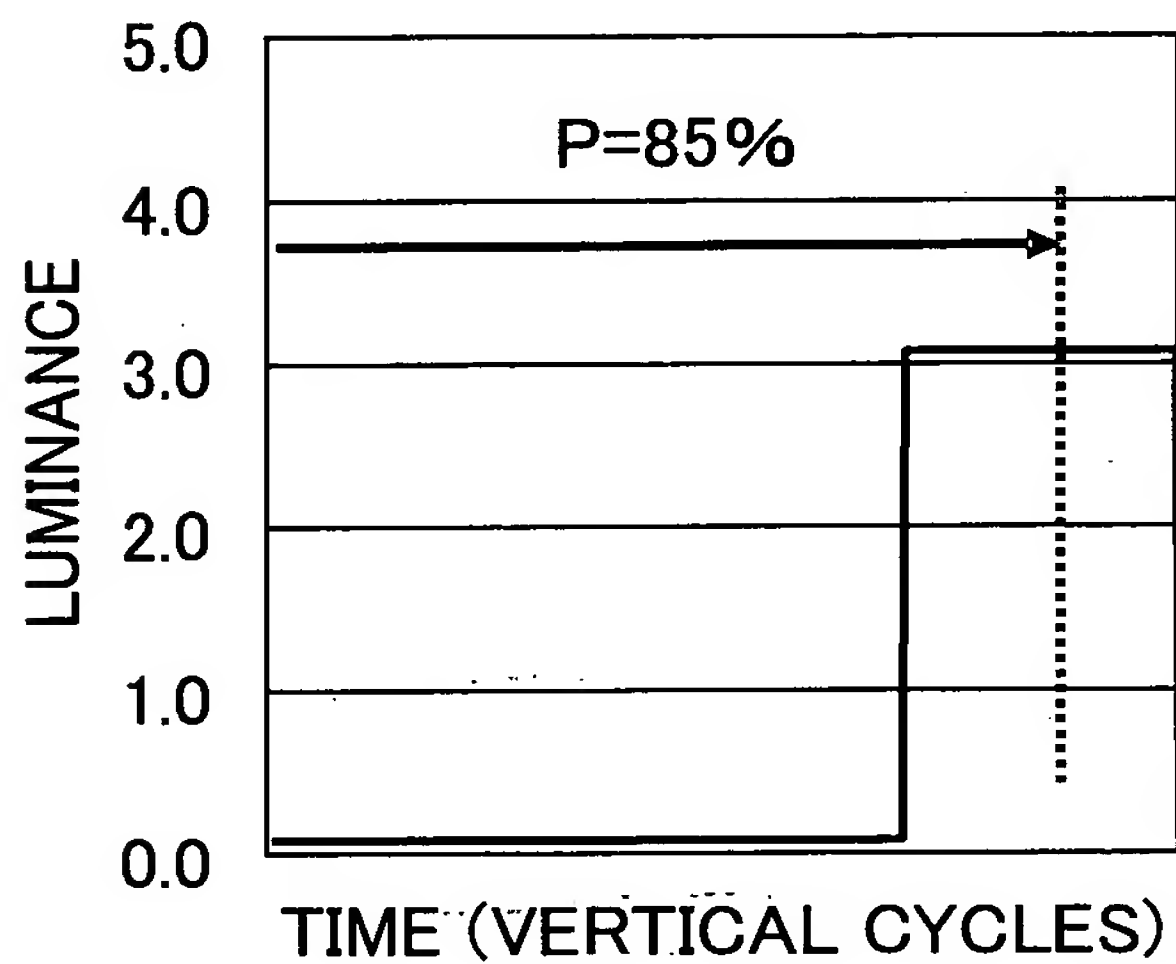


FIG.71 (f)

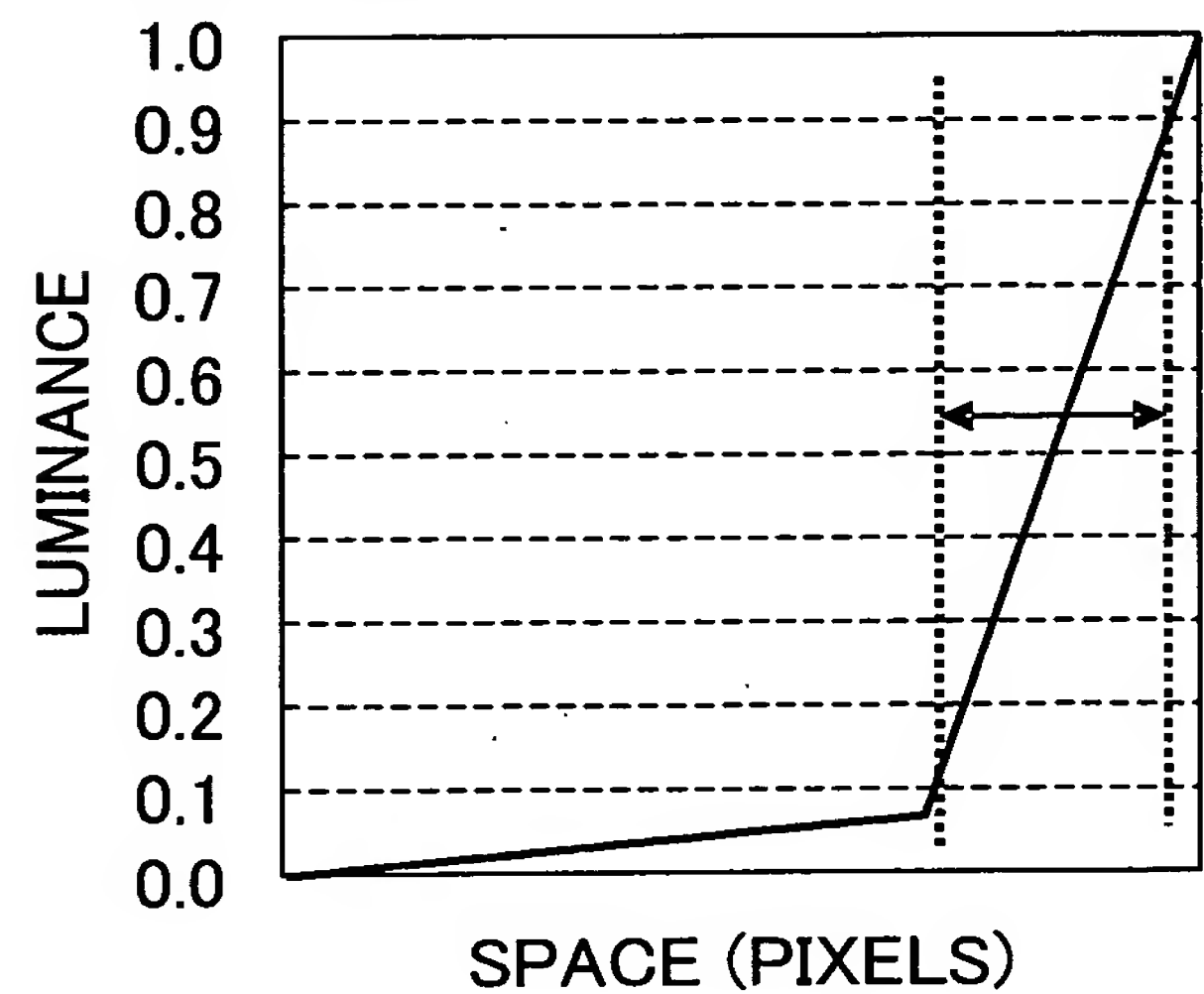


FIG.72

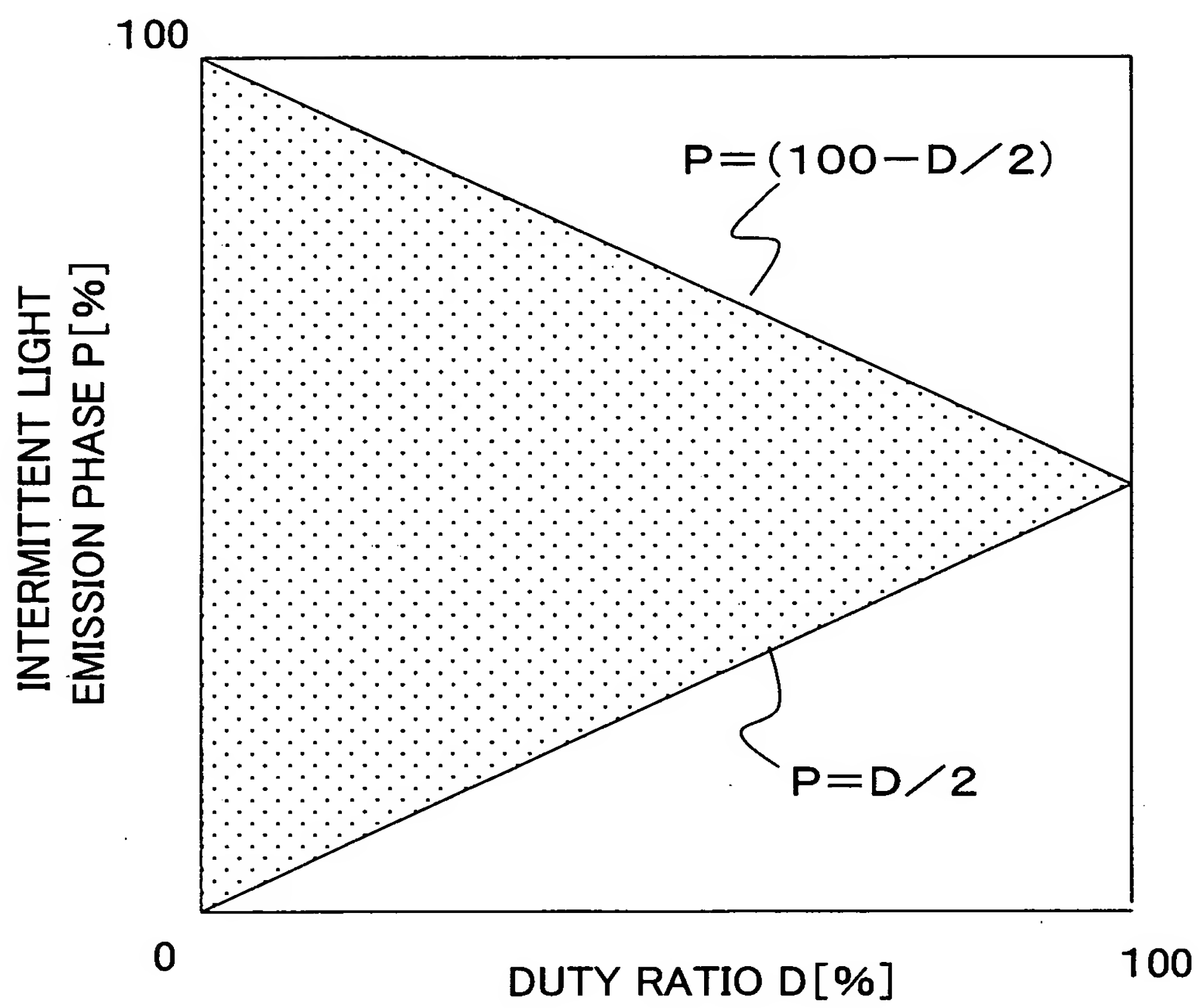


FIG.73(a)

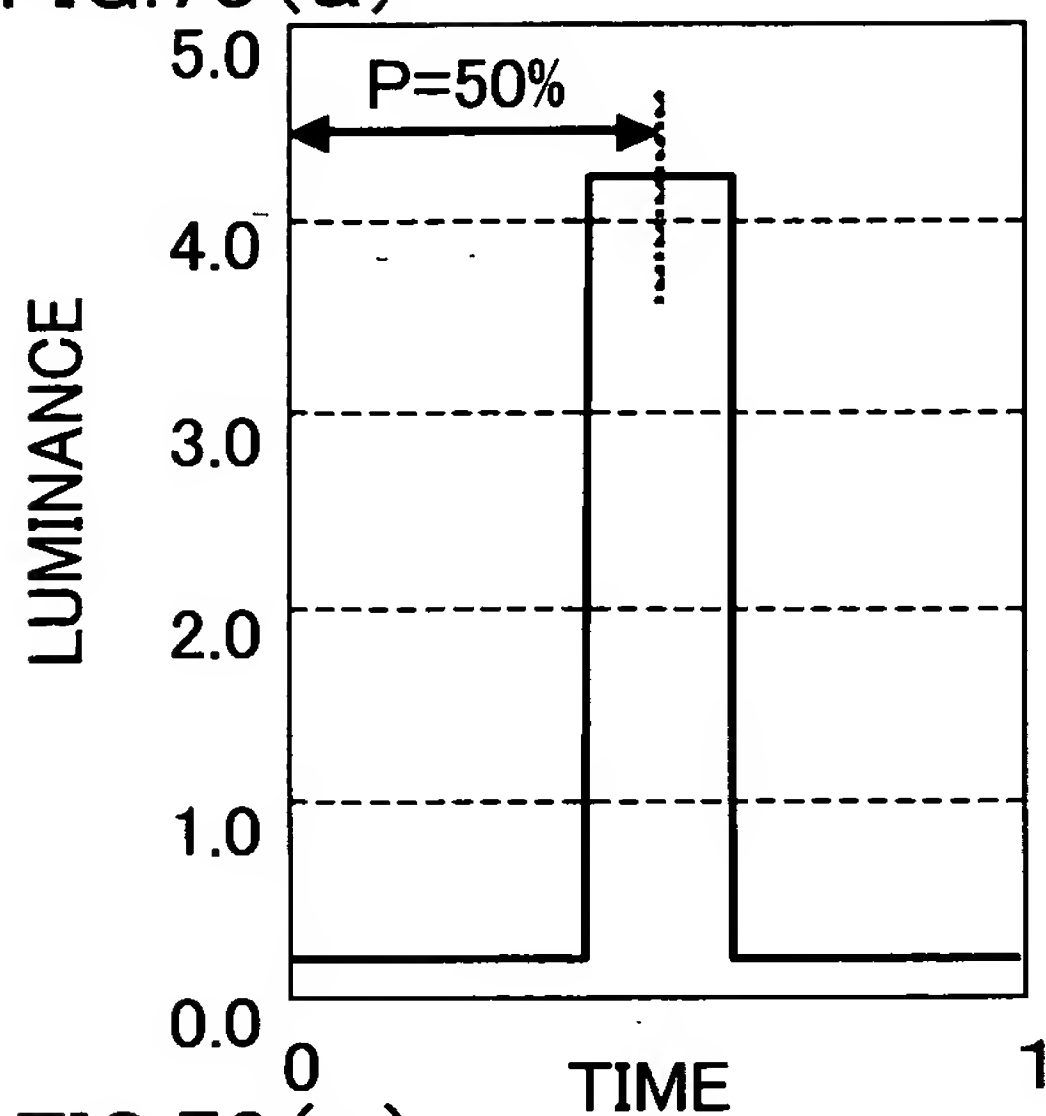


FIG.73(b)

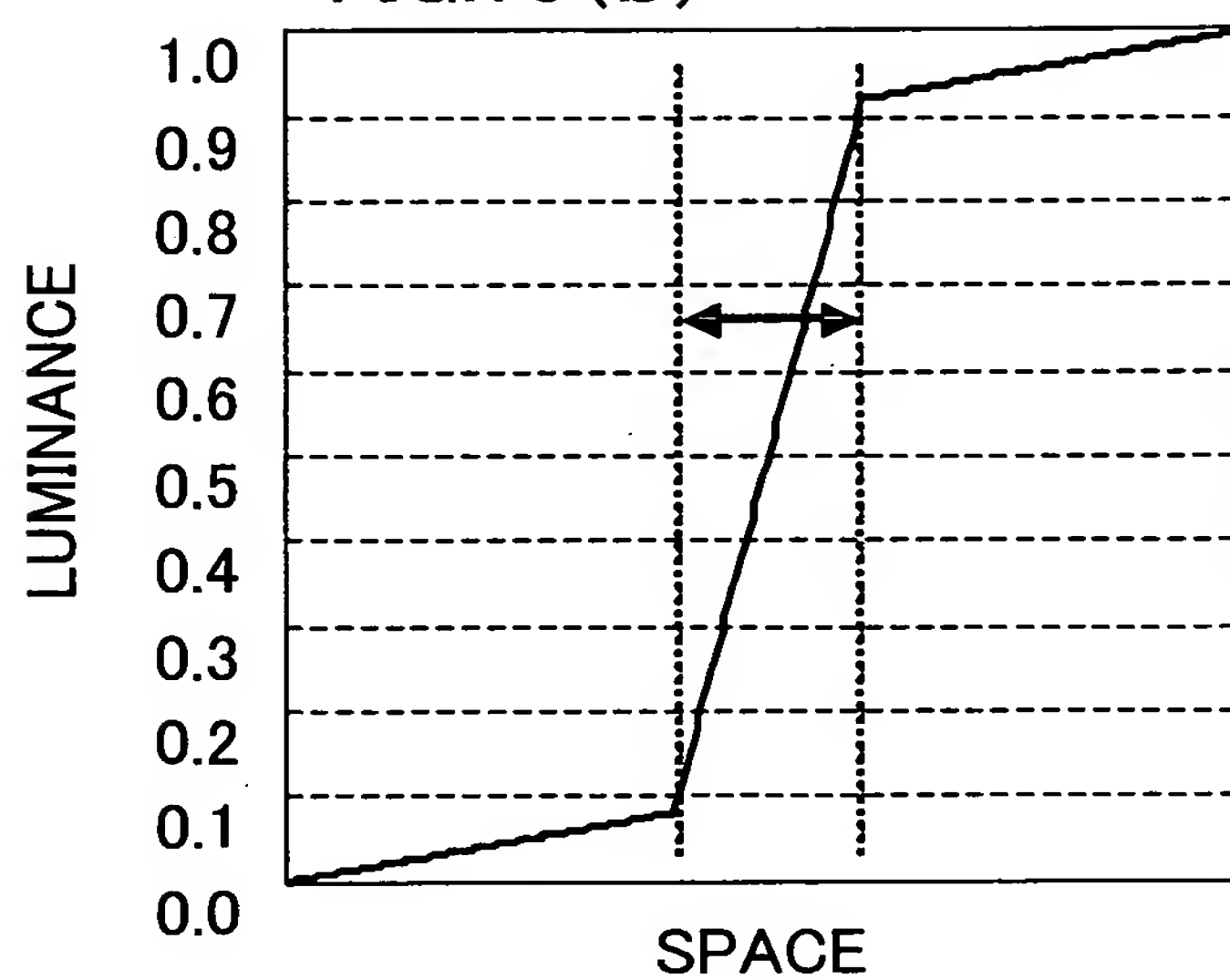


FIG.73(c)

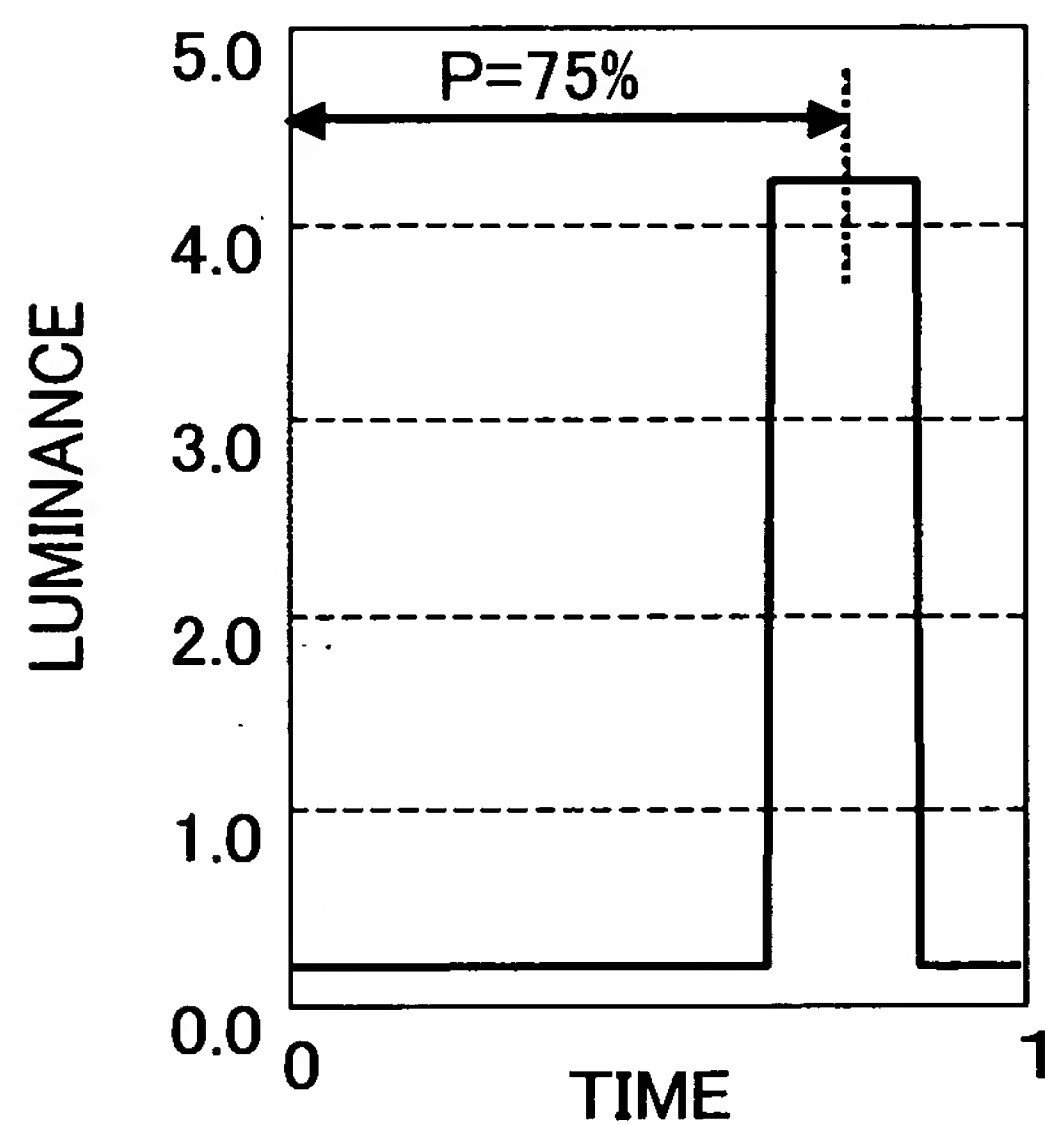


FIG.73(d)

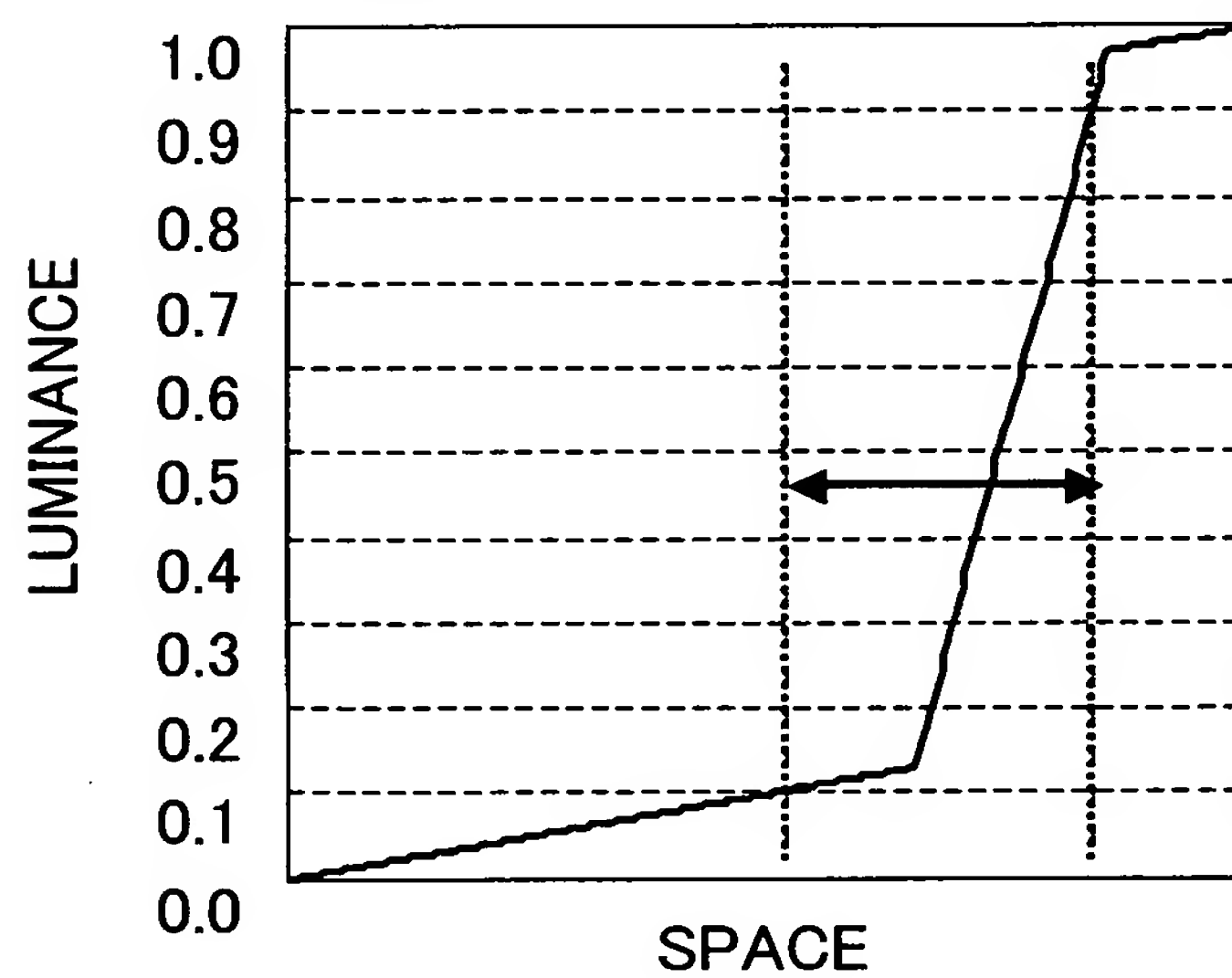


FIG.73(e)

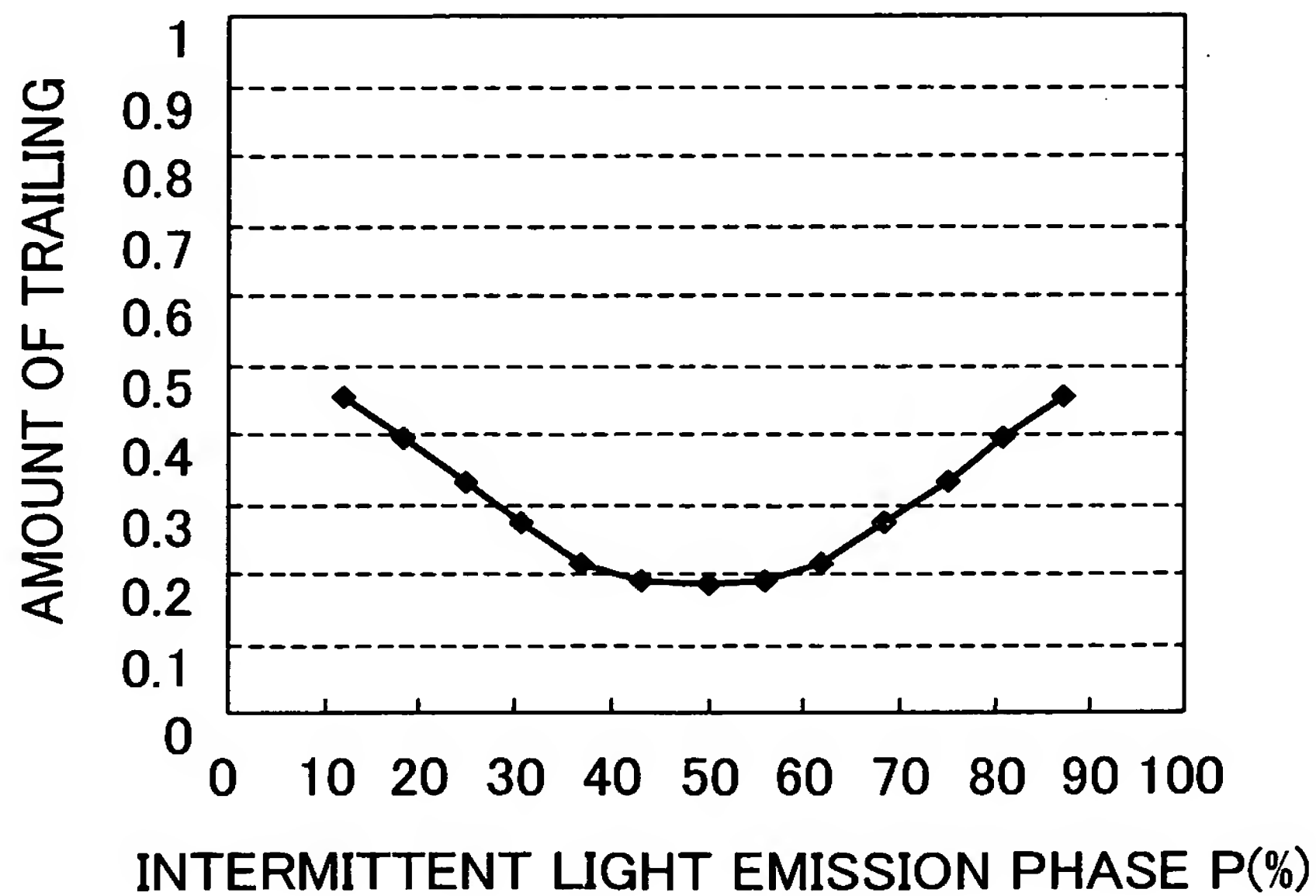


FIG. 74

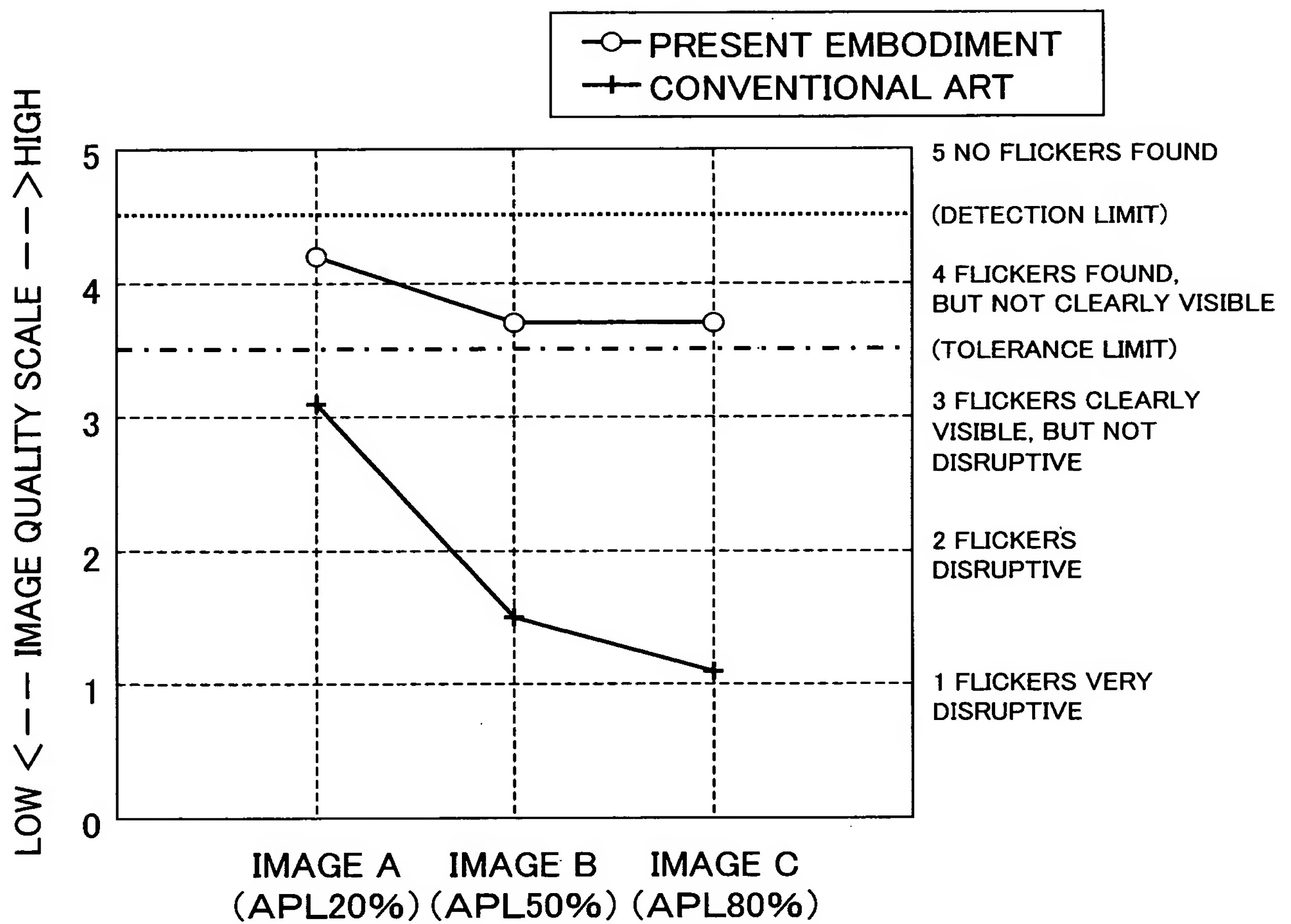


FIG.75

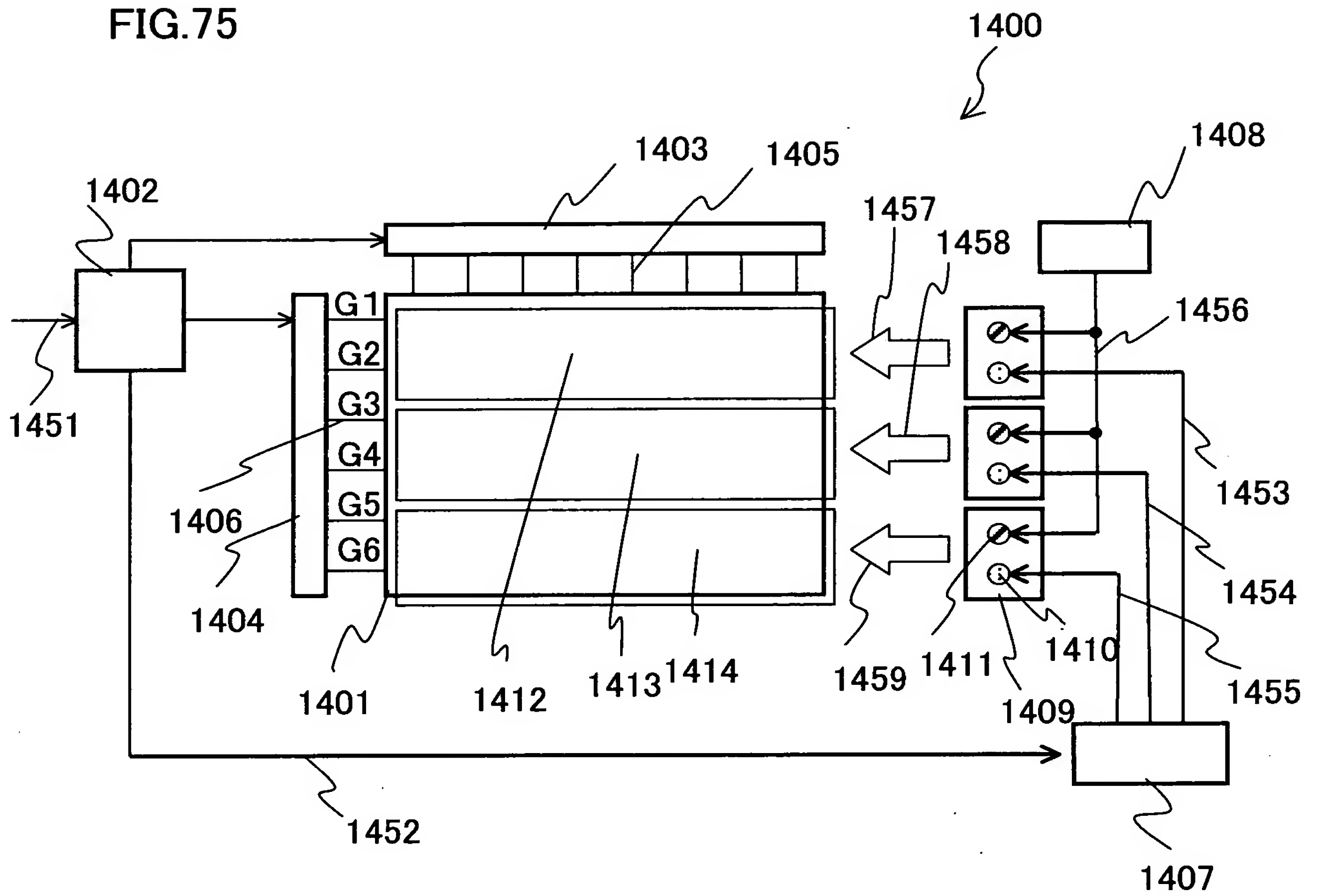


FIG.76

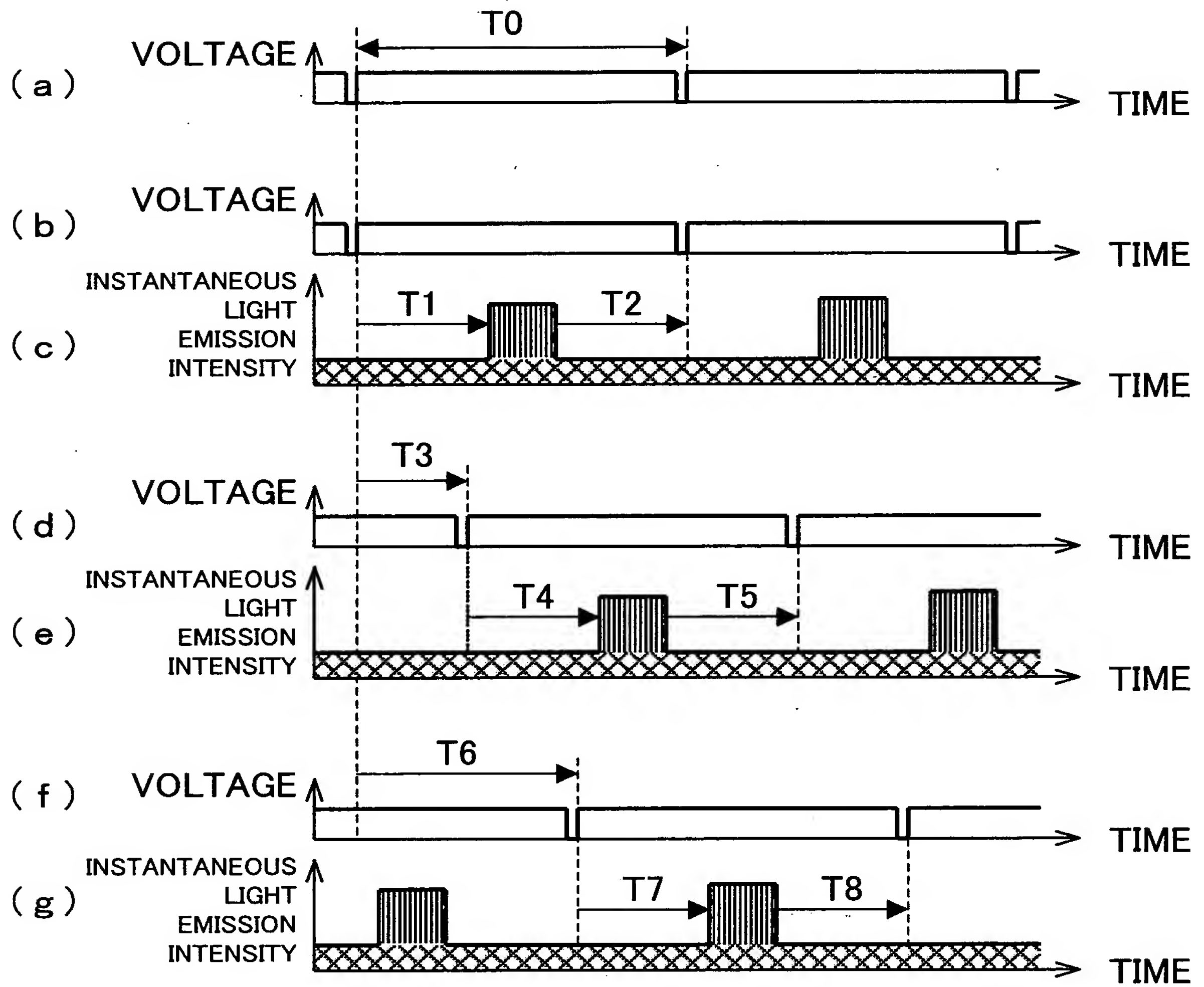


FIG.77

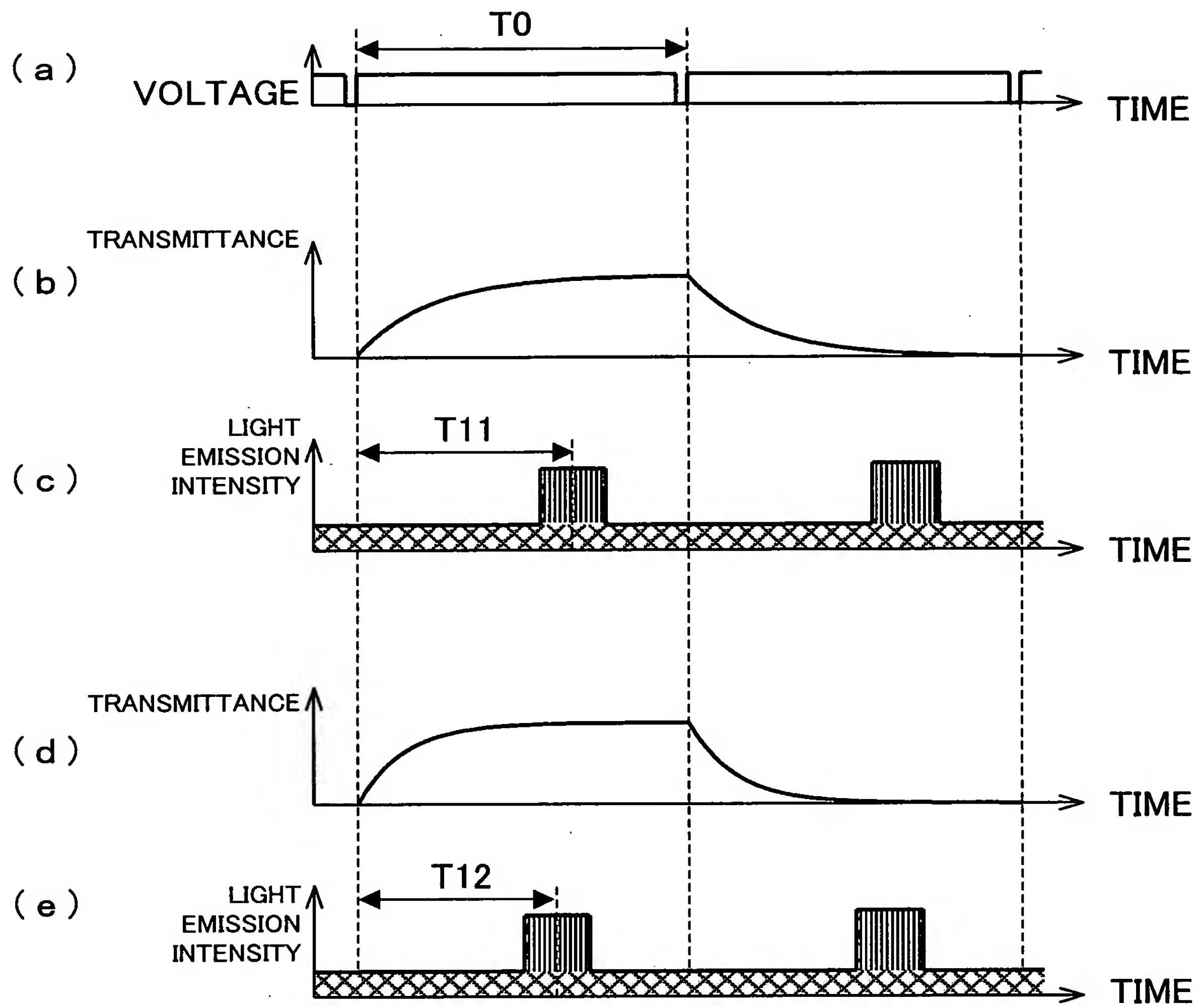


FIG.78(a)

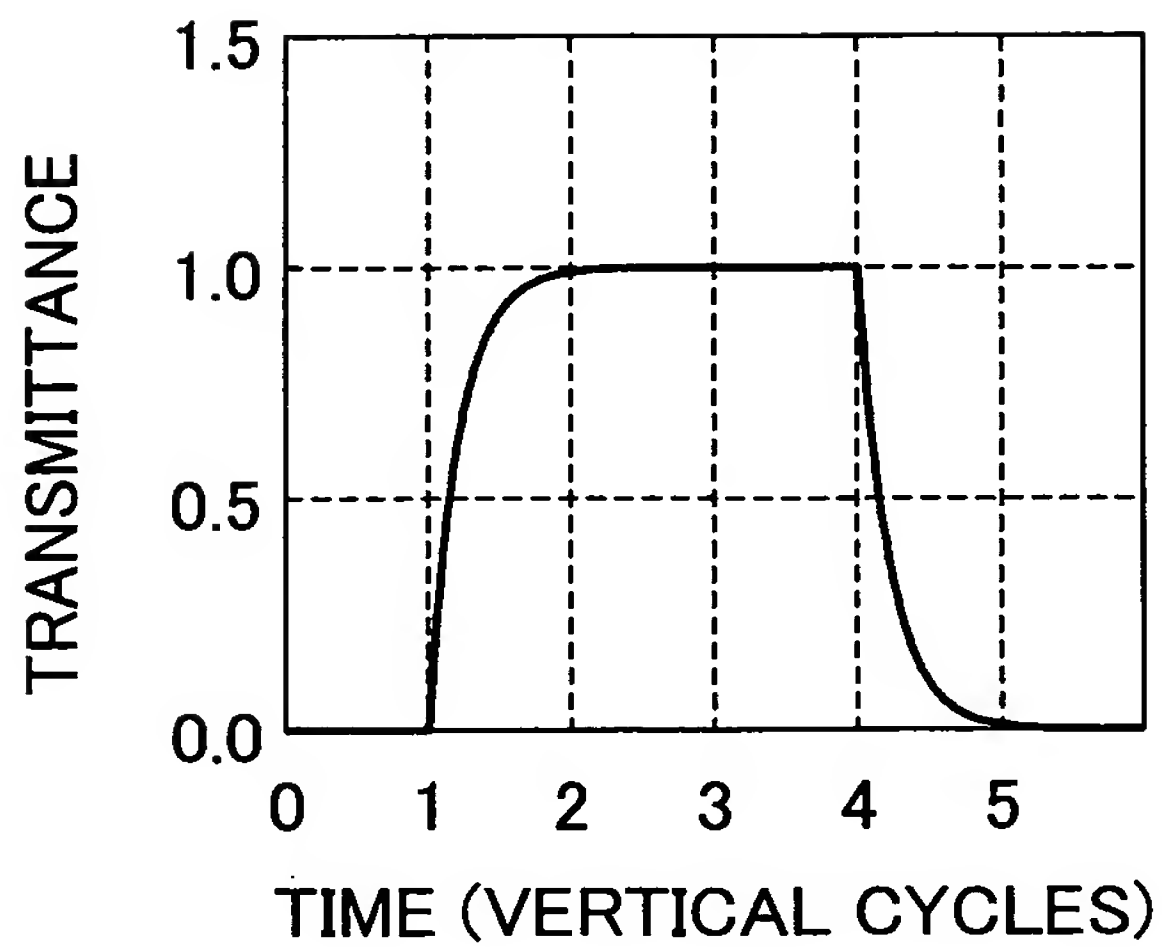


FIG.78(b)

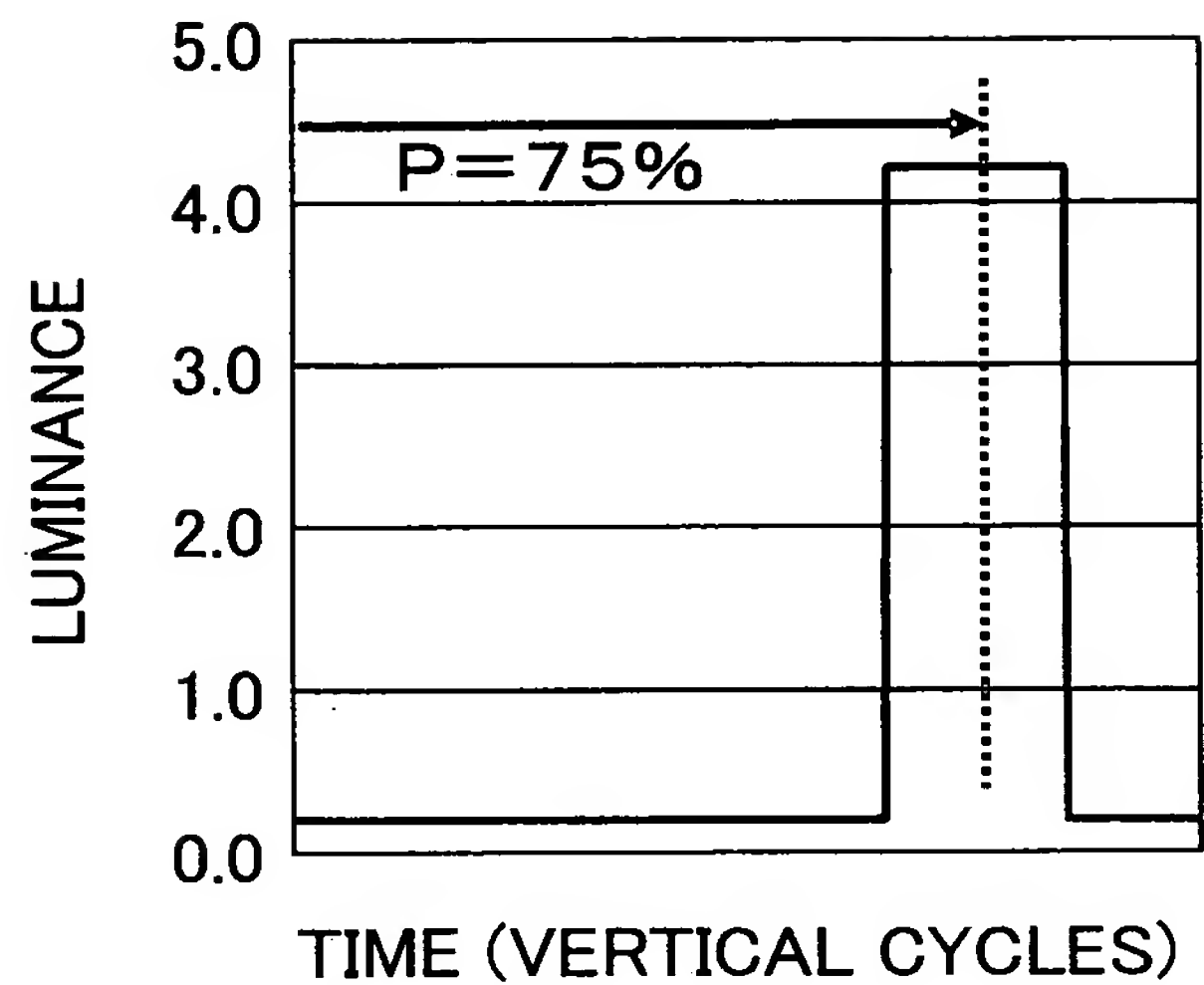


FIG.78(c)

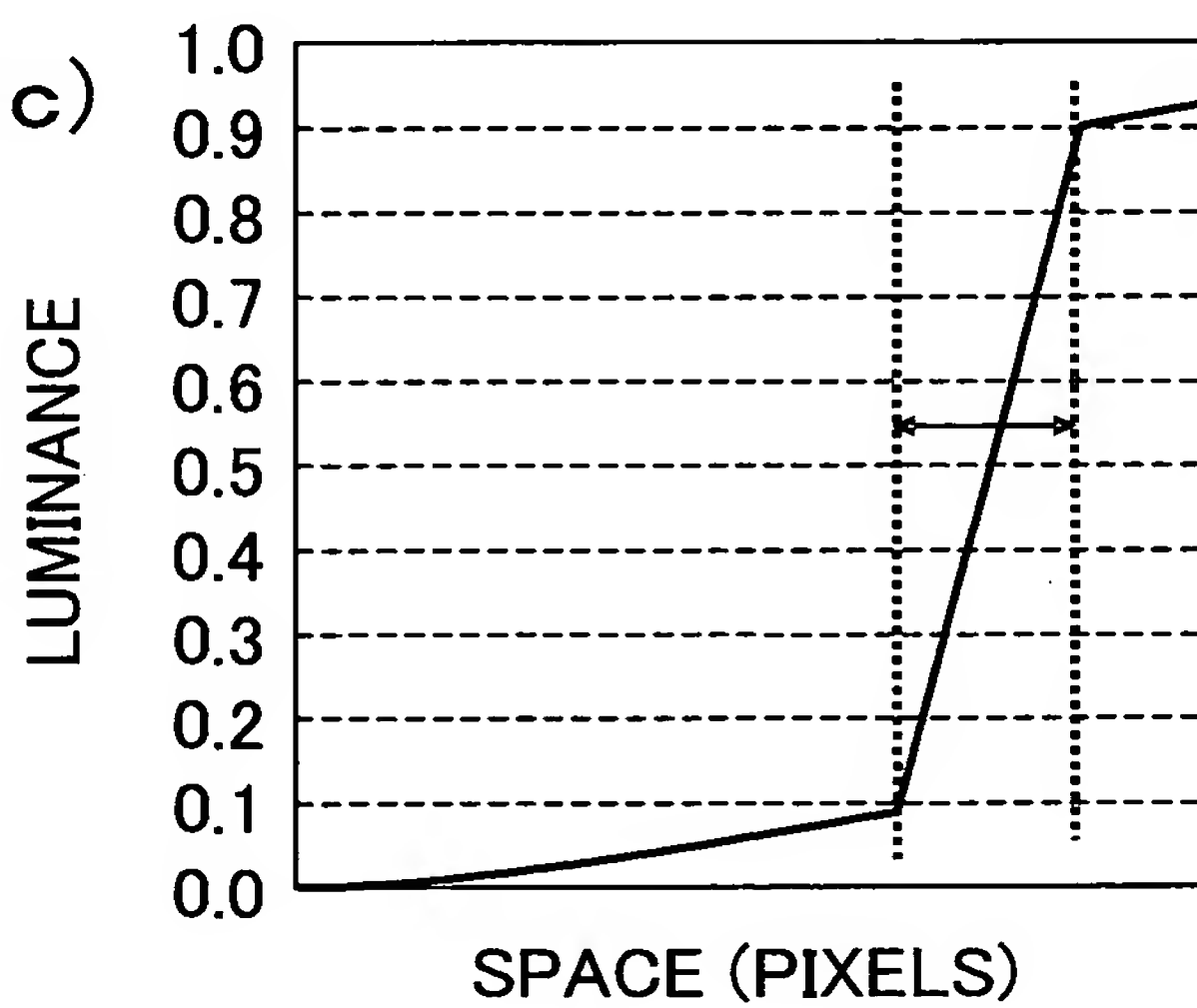


FIG.78(d)

RELATIONSHIP BETWEEN INTERMITTENT LIGHT
EMISSION PHASE P AND AMOUNT OF TRAILING

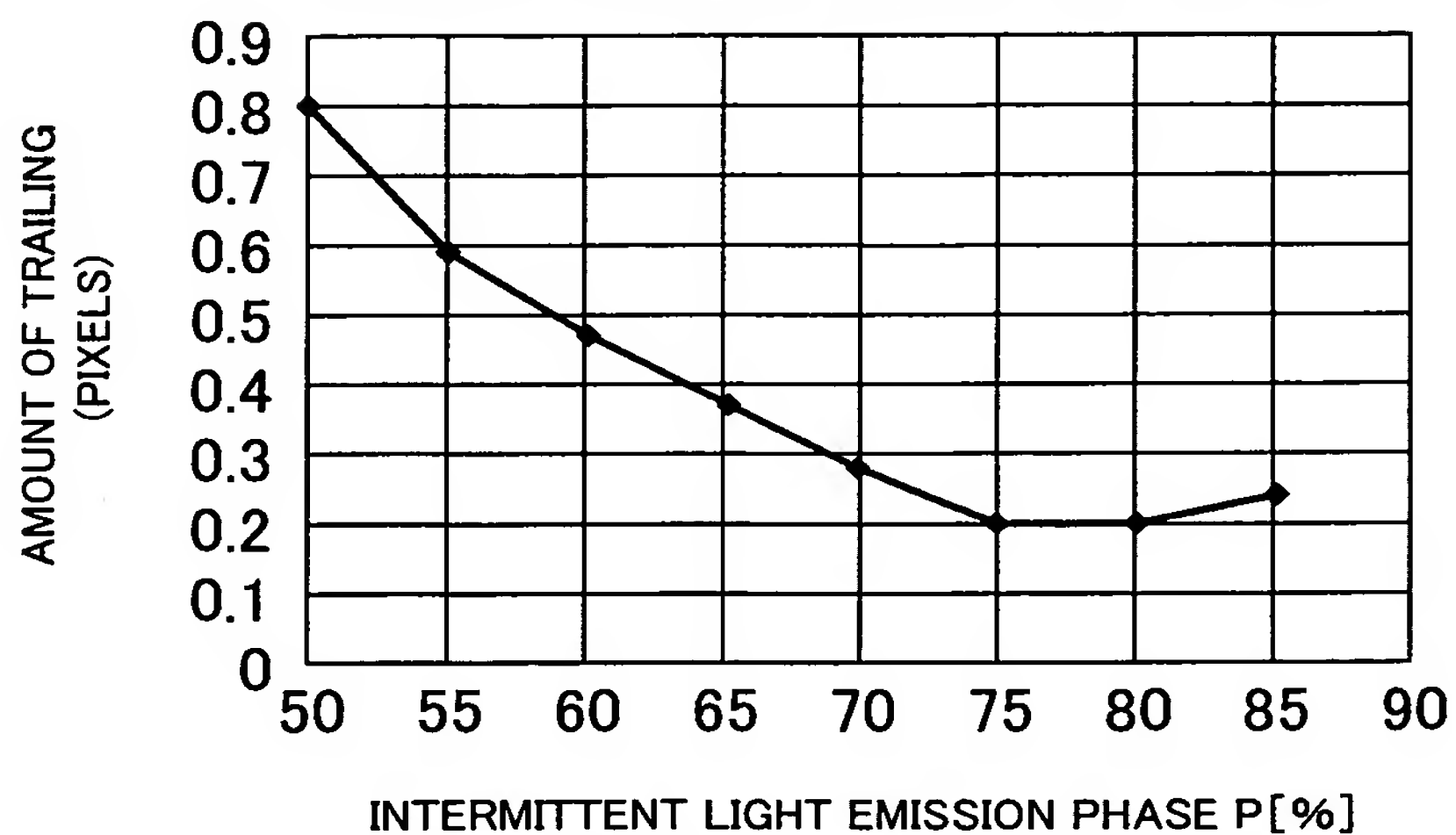


FIG.79(a)

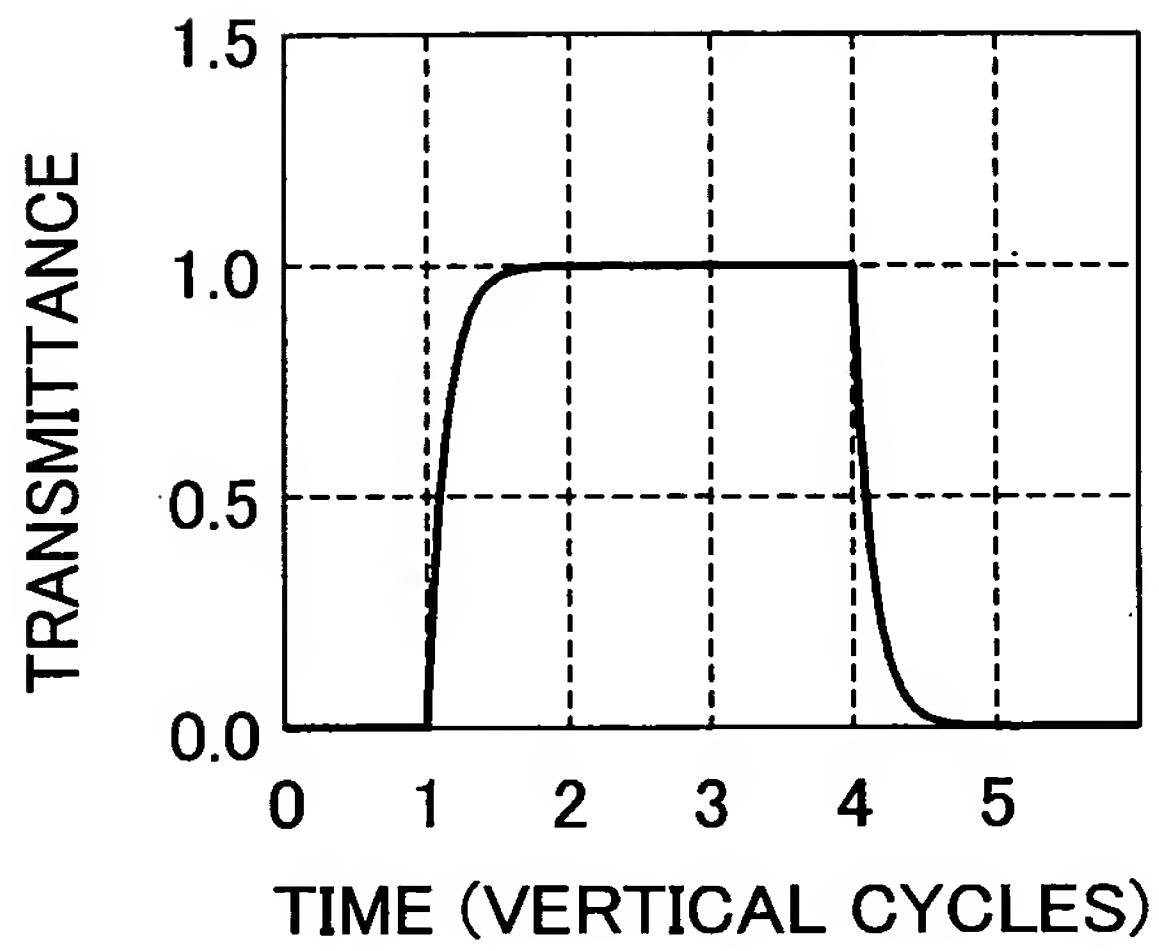


FIG.79(b)

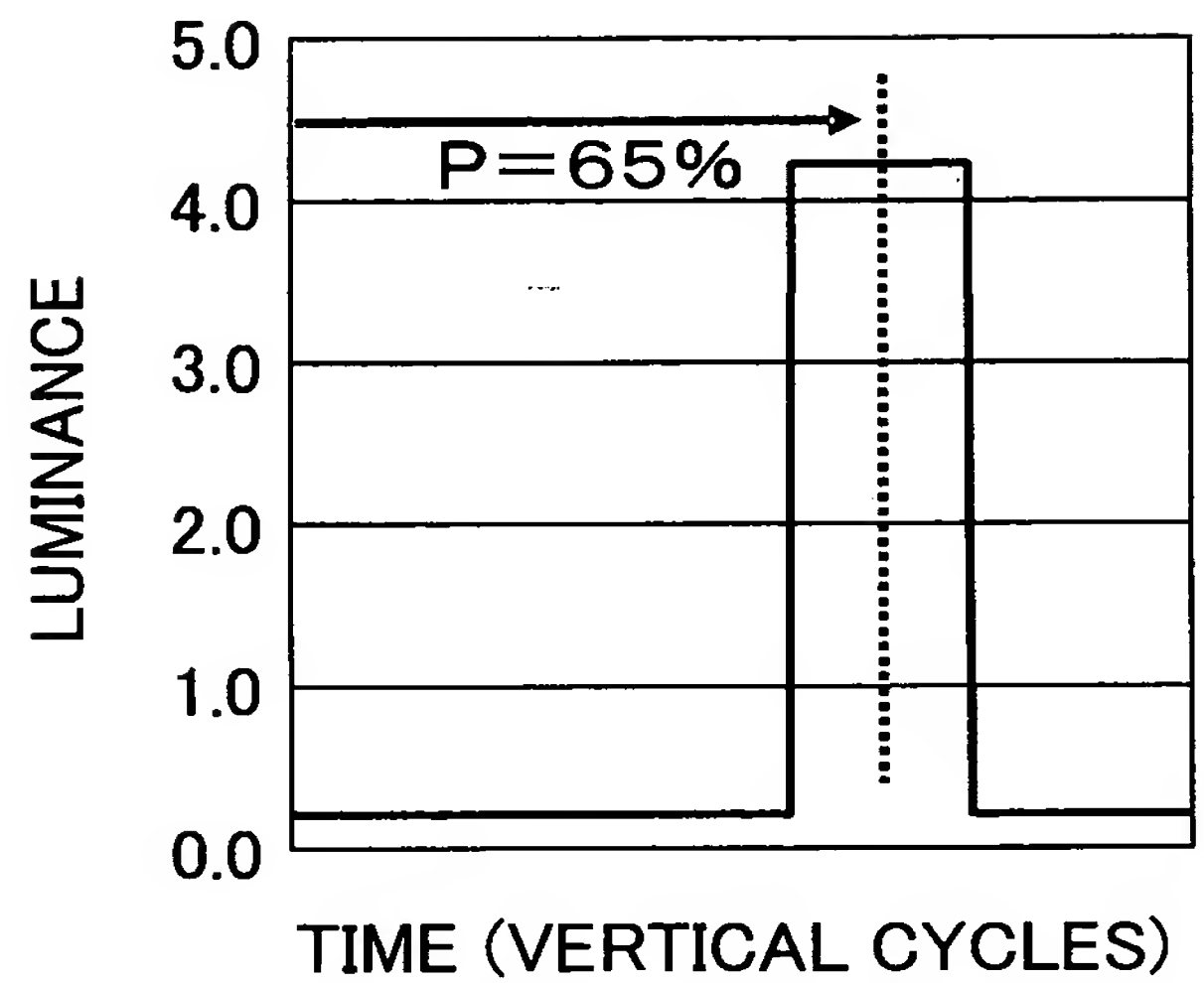


FIG.79(c)

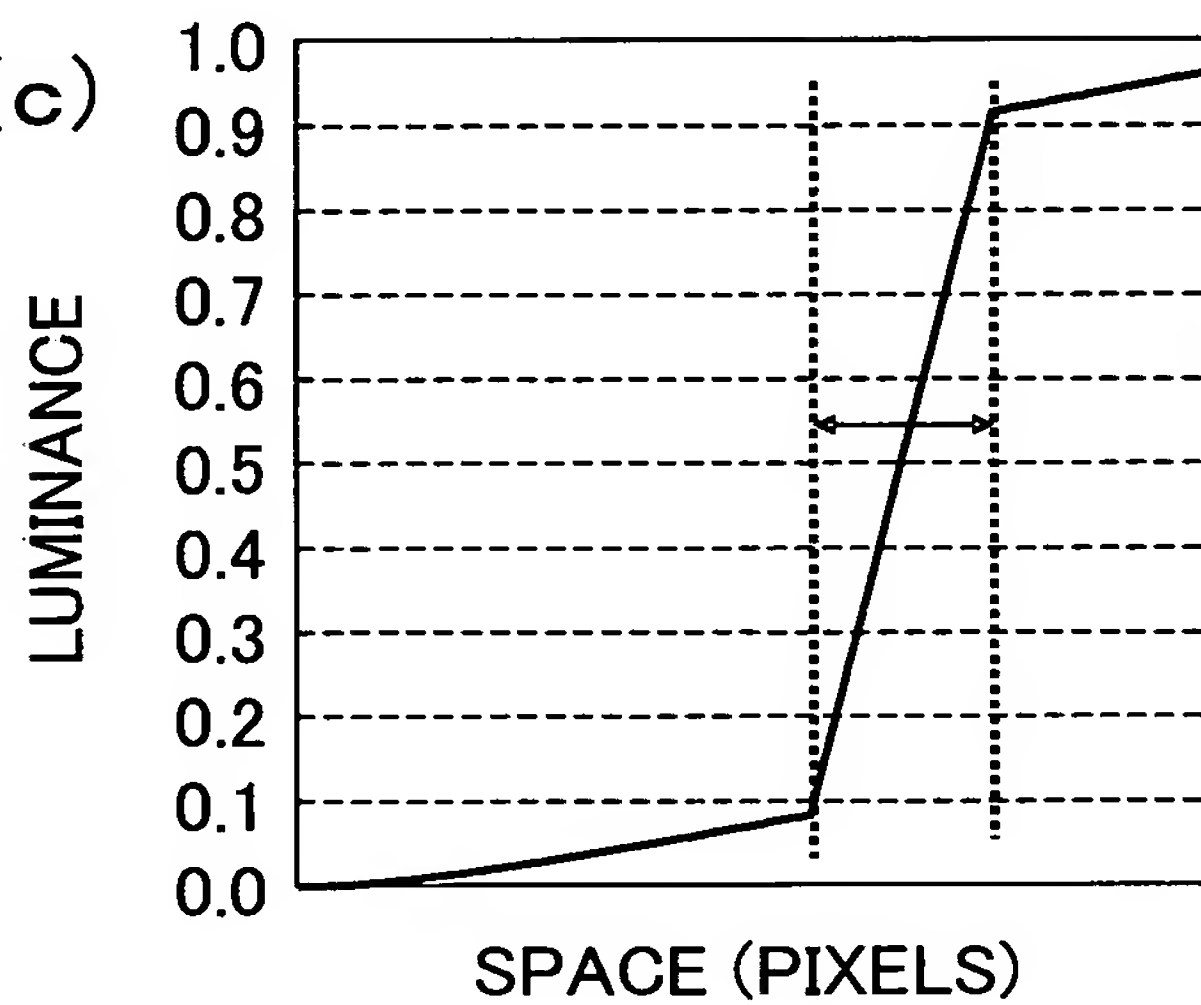


FIG.79(d)

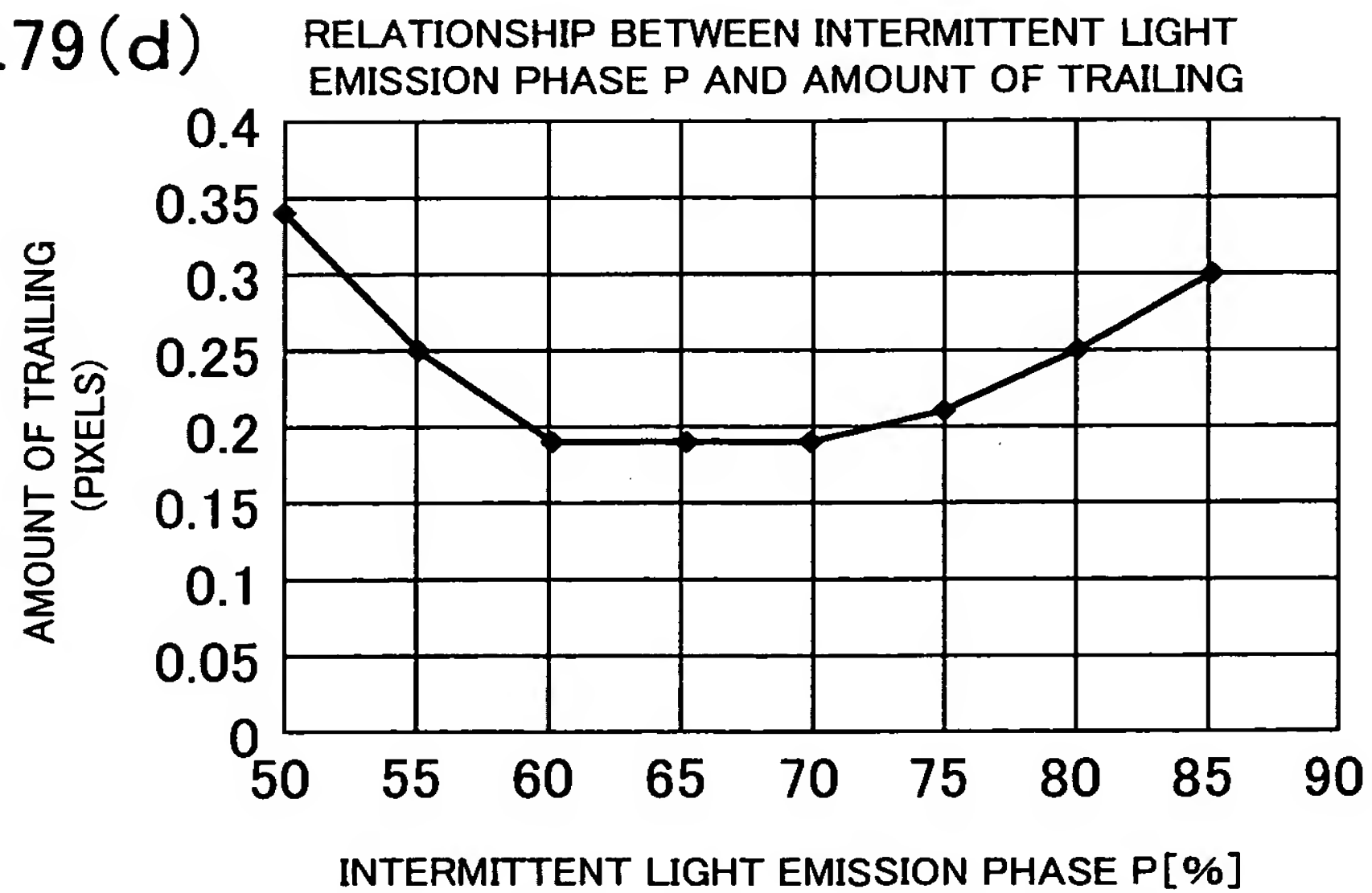


FIG. 80

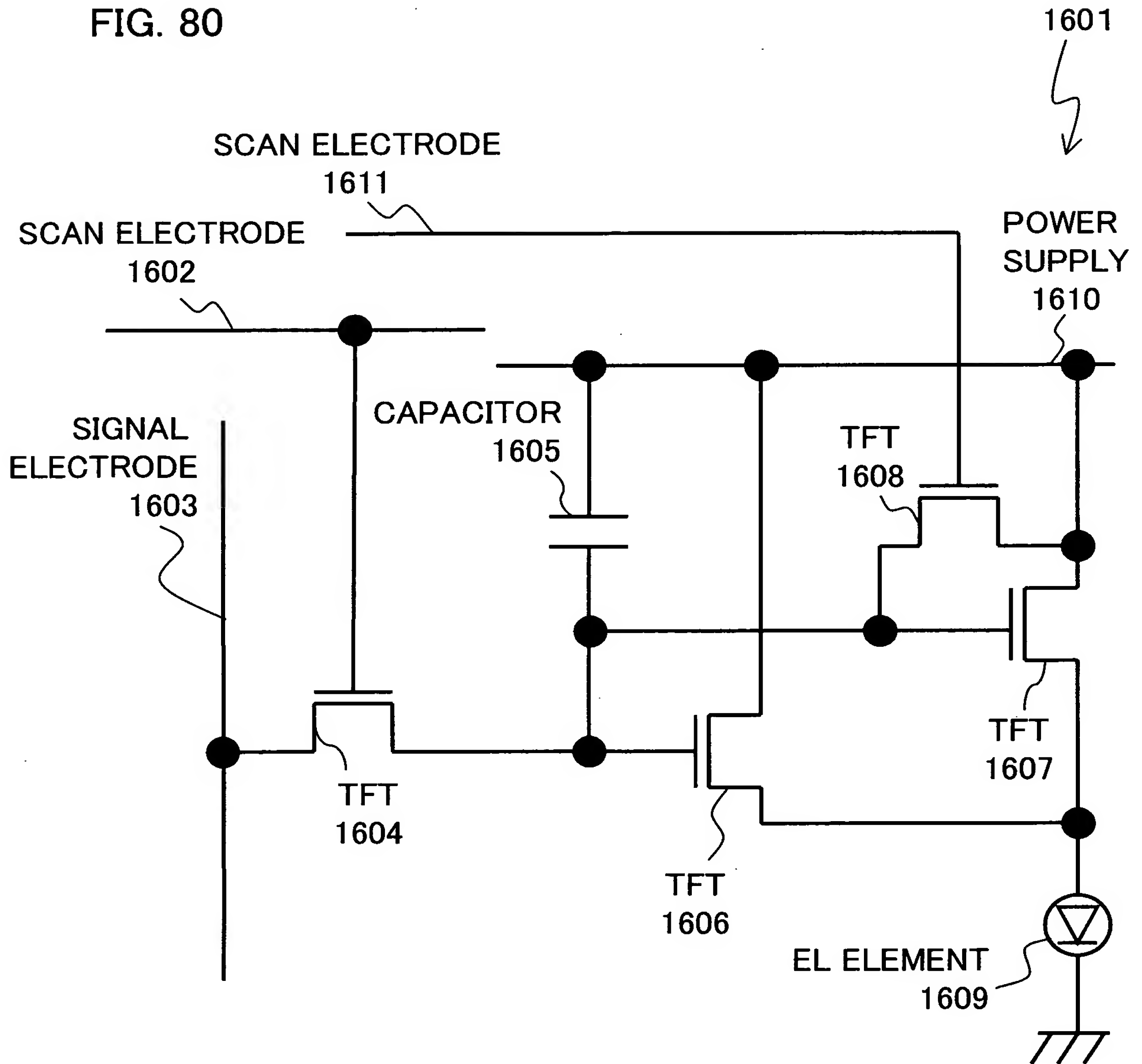
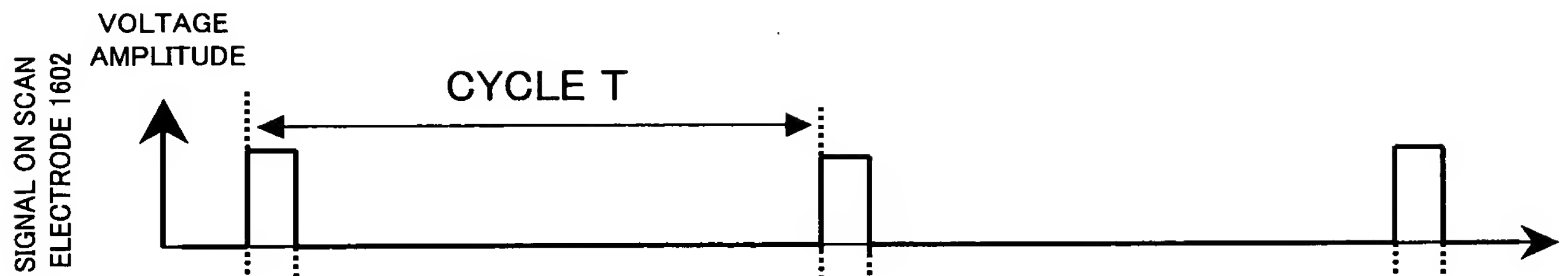
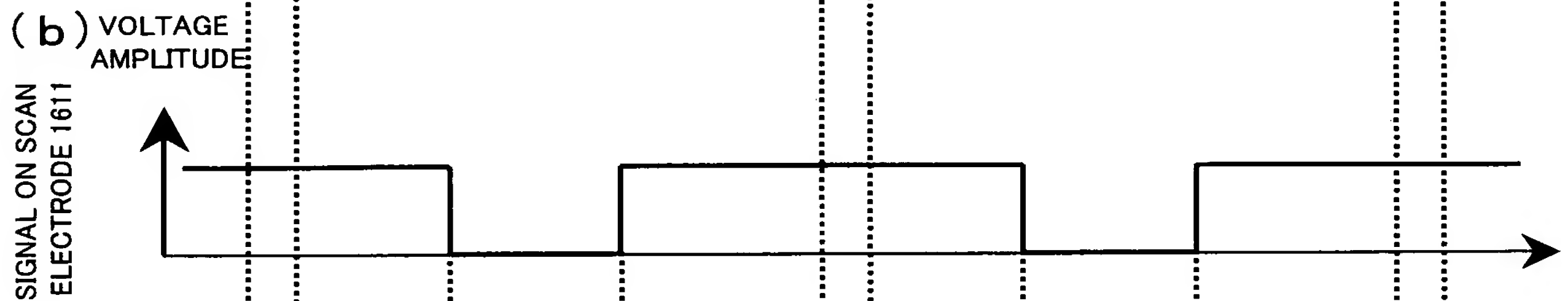


FIG. 81

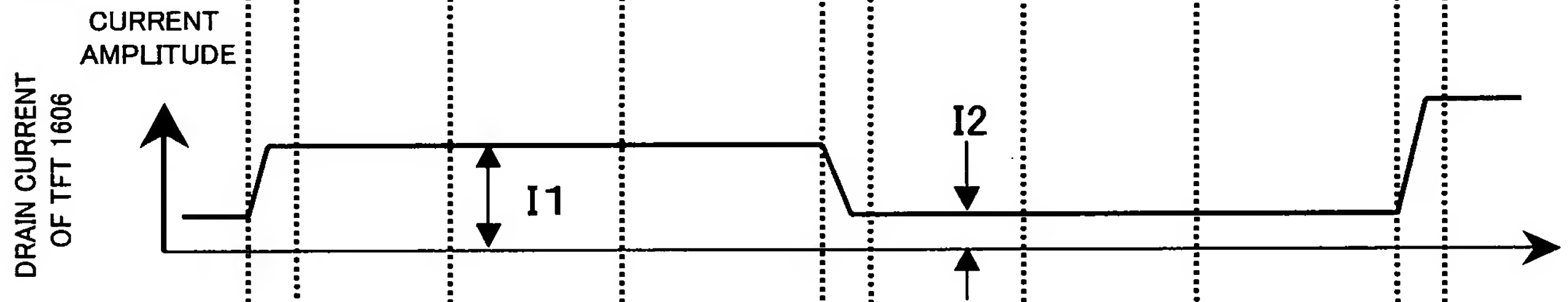
(a)



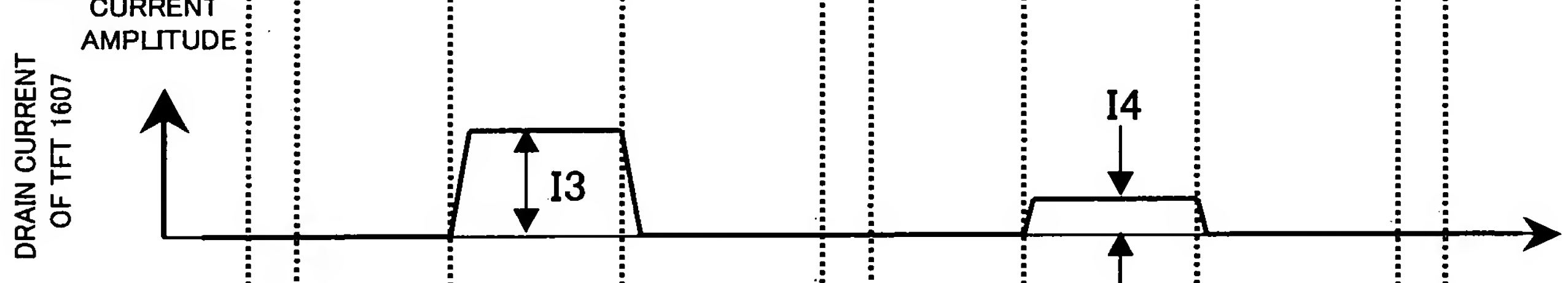
(b)



(c)



(d)



(e)

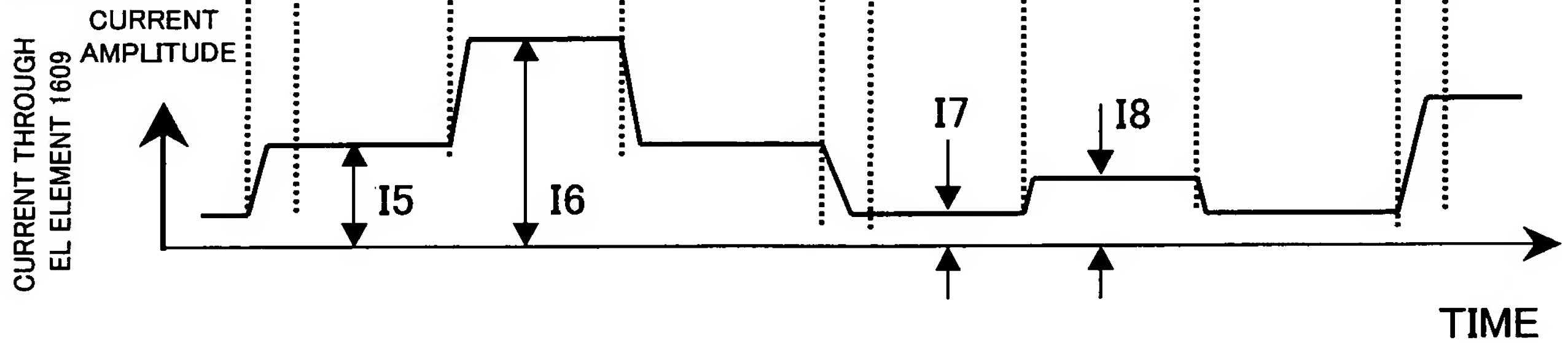


FIG. 82

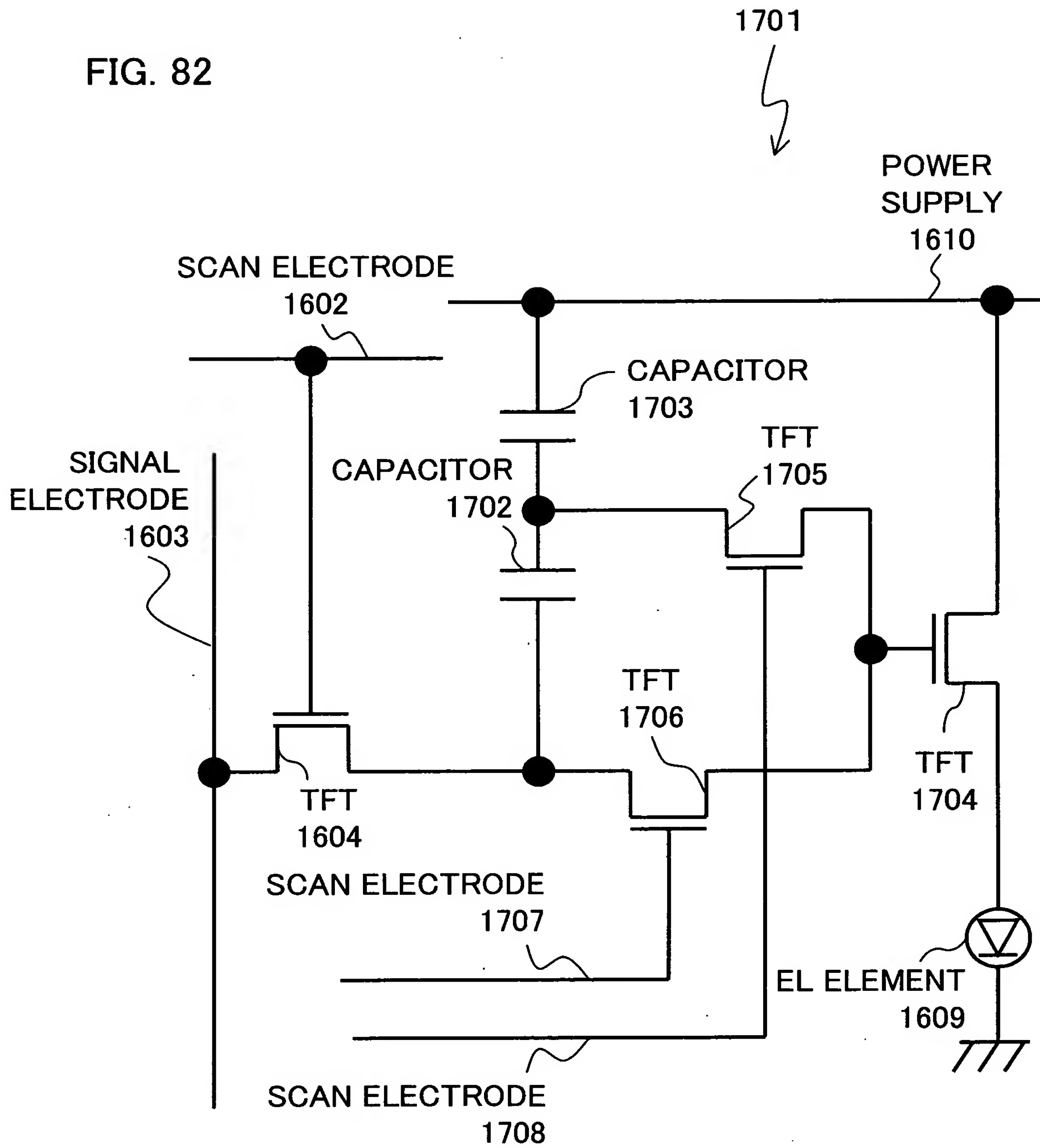


FIG. 83

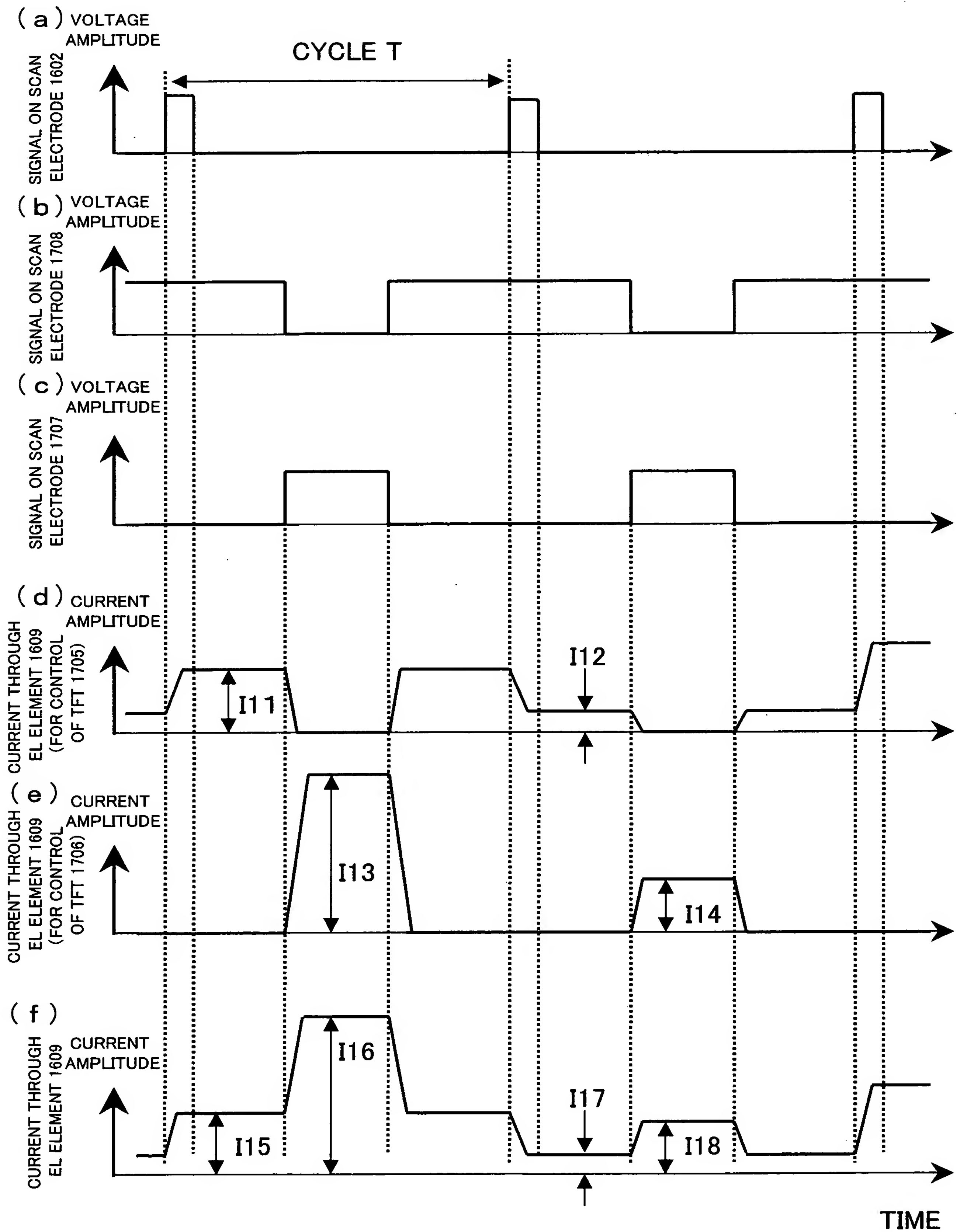


FIG. 84

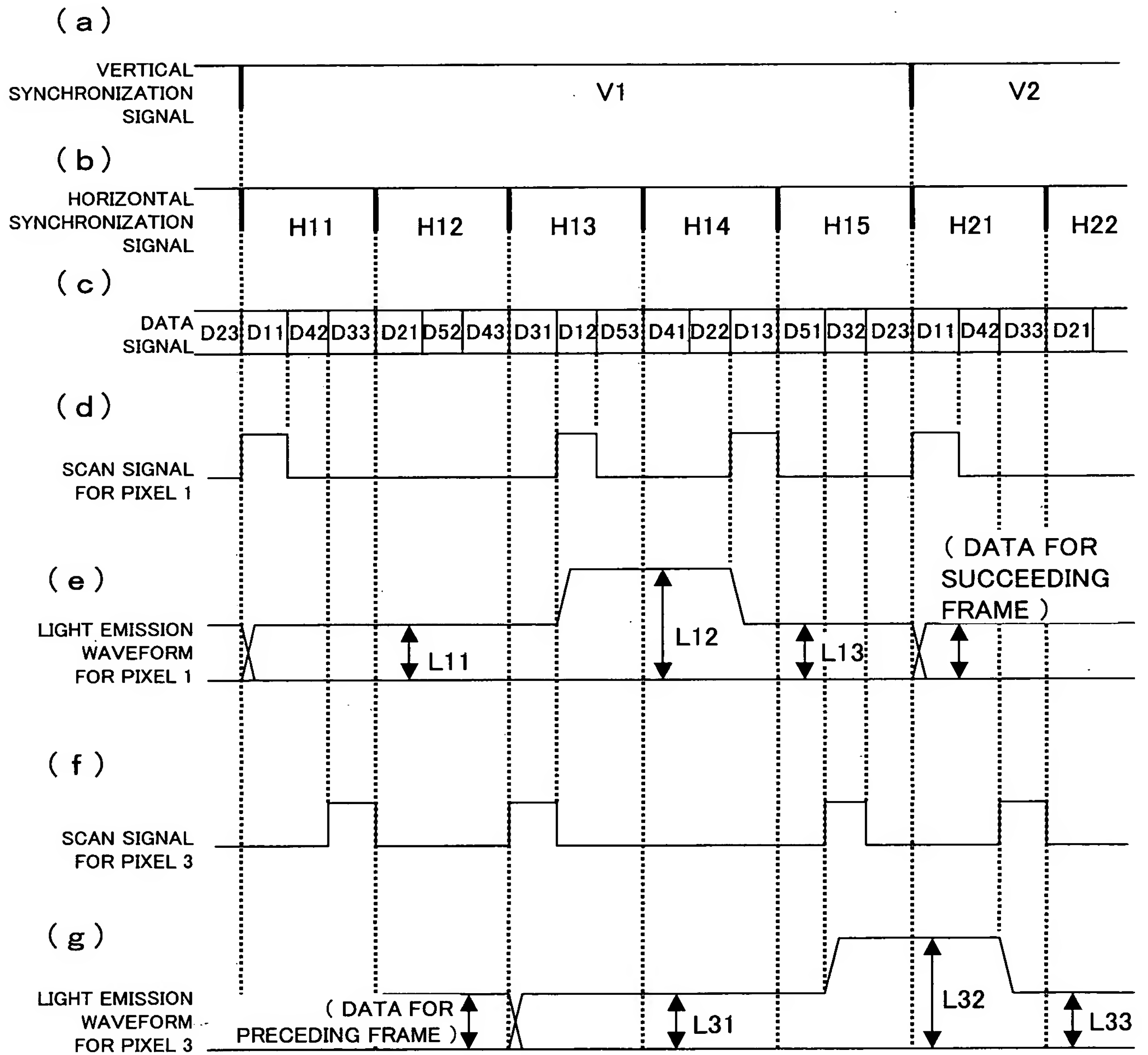


FIG. 85(a)

RELATIONSHIP BETWEEN AMOUNTS OF TRAILING AND FLICKERING

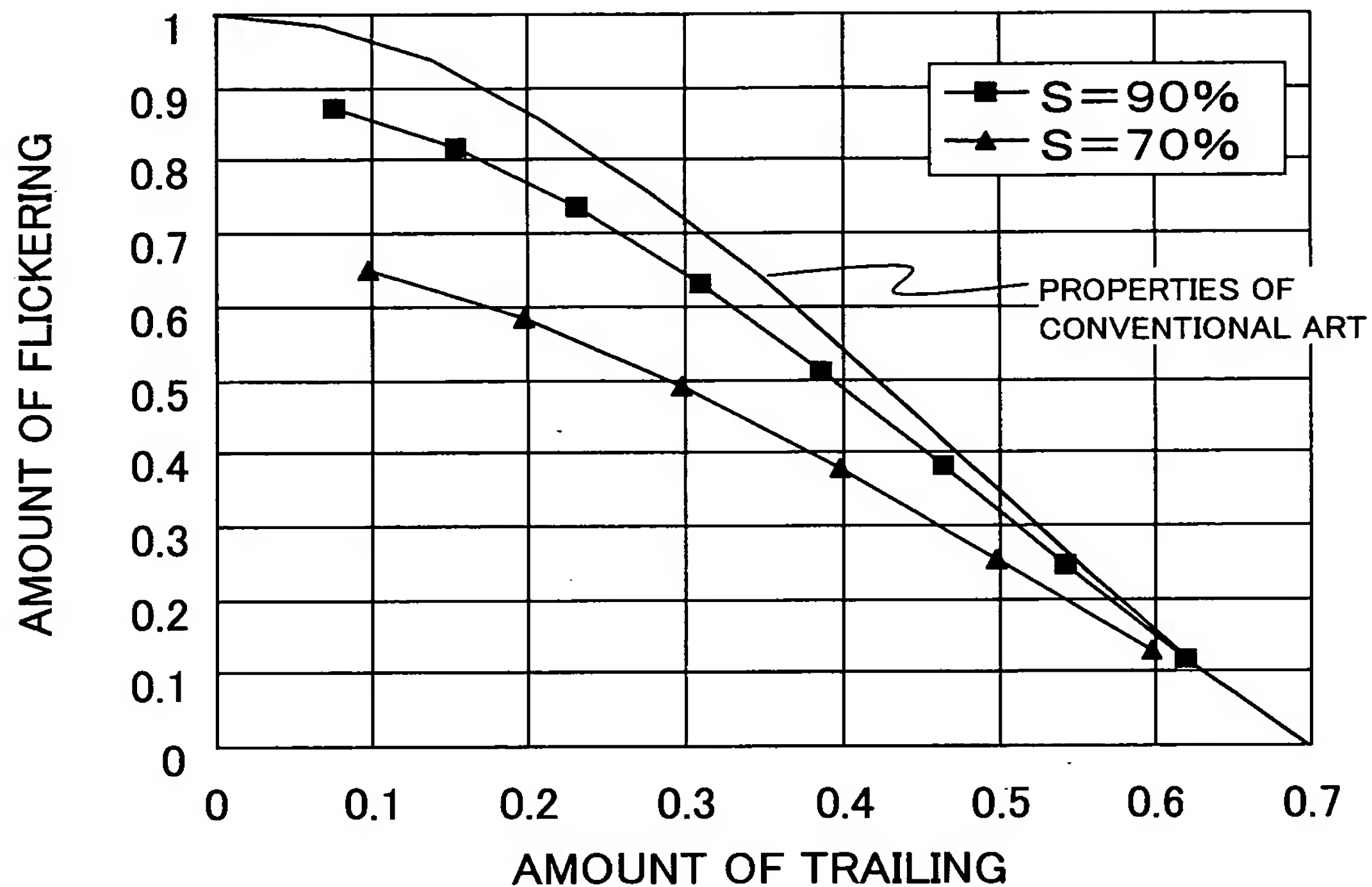


FIG. 85(b)

DUTY RATIO D	AMOUNT OF TRAILING	AMOUNT OF FLICKERING
10	0.08	0.87
20	0.16	0.82
30	0.23	0.74
40	0.31	0.63
50	0.39	0.51
60	0.47	0.38
70	0.54	0.25
80	0.62	0.12

DATA WHERE S FIXED AT 90%

FIG. 85(c)

DUTY RATIO D	AMOUNT OF TRAILING	AMOUNT OF FLICKERING
10	0.10	0.65
20	0.20	0.58
30	0.30	0.49
40	0.40	0.38
50	0.50	0.25
60	0.60	0.13

DATA WHERE S FIXED AT 70%

FIG. 86(a)
RELATIONSHIP BETWEEN AMOUNTS OF TRAILING AND FLICKERING

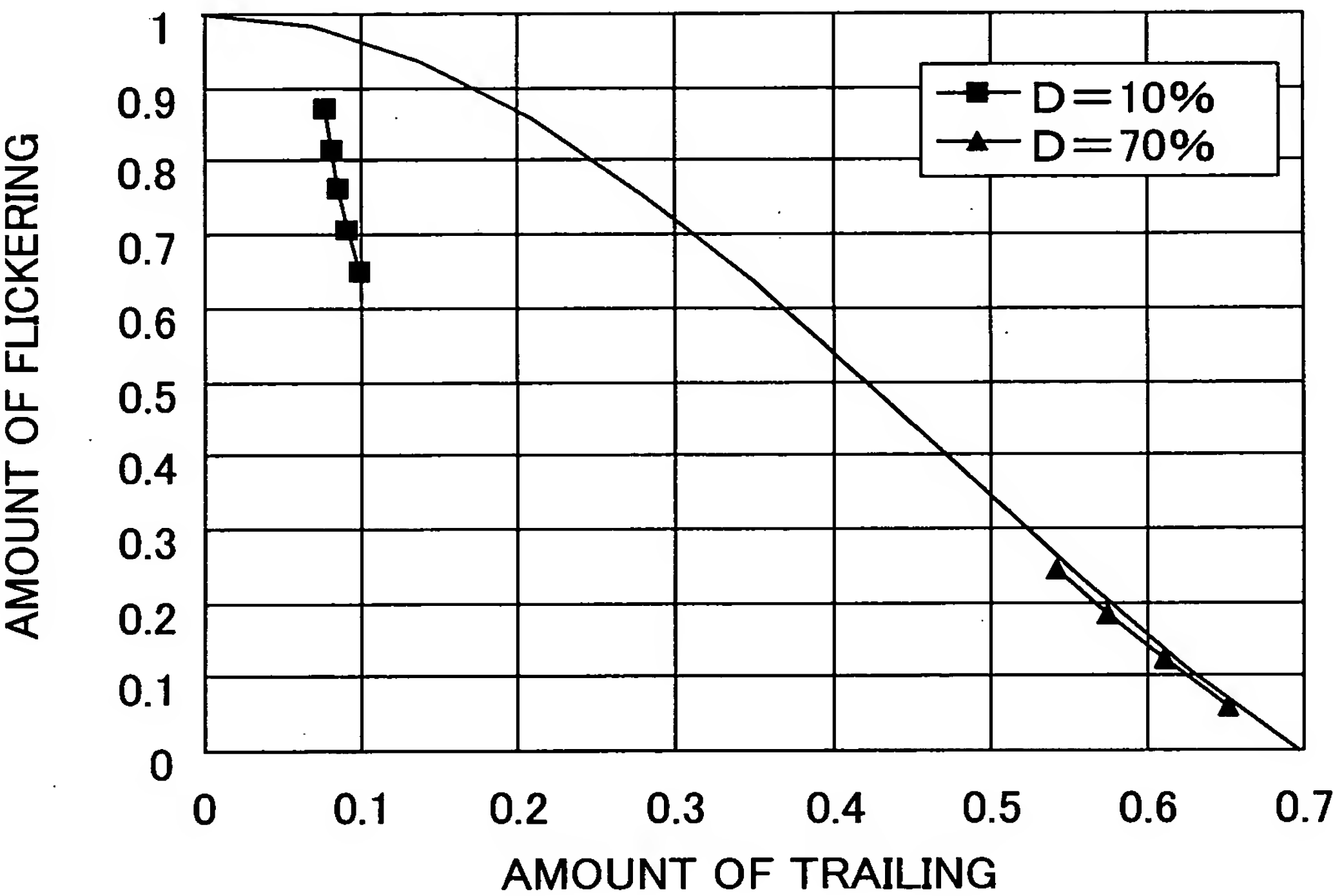


FIG. 86(b)

INTENSITY RATIO S OF FIRST LIGHT	AMOUNT OF TRAILING	AMOUNT OF FLICKERING
90	0.08	0.87
85	0.08	0.82
80	0.09	0.76
75	0.09	0.71
70	0.10	0.65

D FIXED AT 10%

FIG. 86(c)

INTENSITY RATIO S OF FIRST LIGHT	AMOUNT OF TRAILING	AMOUNT OF FLICKERING
90	0.54	0.25
85	0.58	0.18
80	0.61	0.12
75	0.65	0.06

D FIXED AT 70%

FIG. 87(a)

RELATIONSHIP BETWEEN AMOUNTS OF TRAILING AND FLICKERING

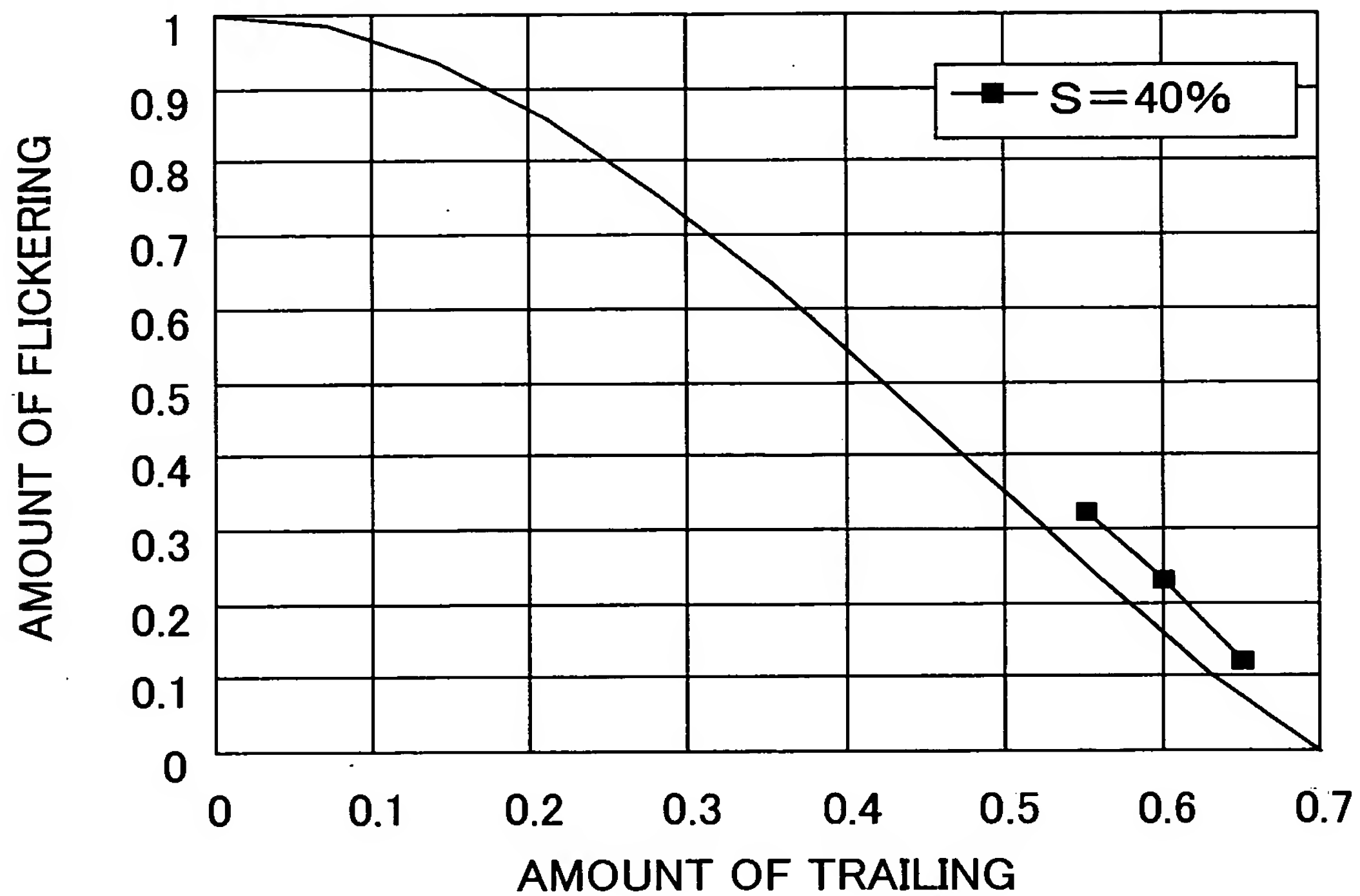


FIG. 87 (b)

DUTY RATIO D	AMOUNT OF TRAILING	AMOUNT OF FLICKERING
10	0.55	0.323
20	0.6	0.2333
30	0.65	0.1228

S FIXED AT 40%

FIG. 88(a)

RELATIONSHIP BETWEEN AMOUNTS OF TRAILING AND FLICKERING

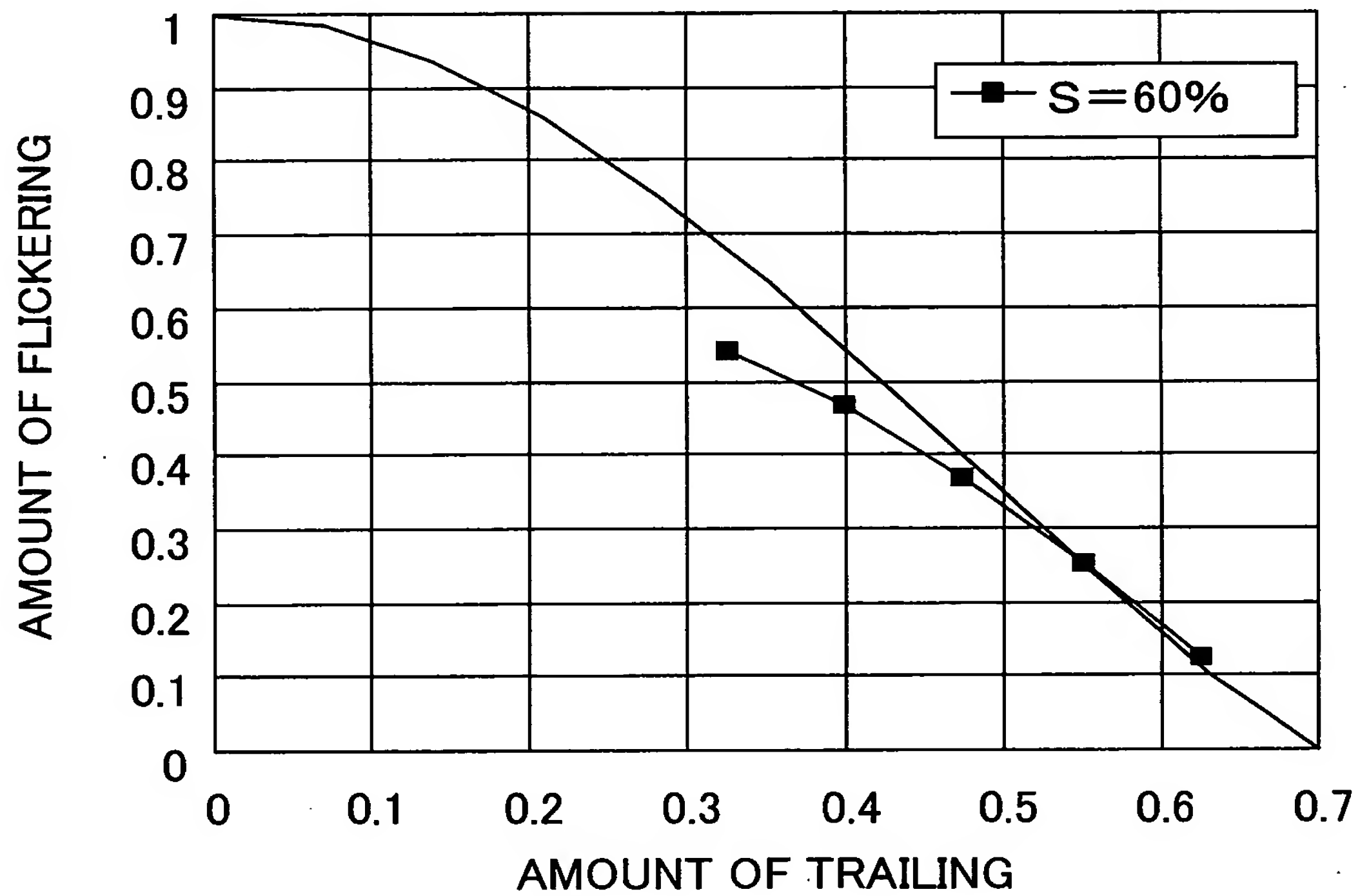


FIG. 88(b)

DUTY RATIO D	AMOUNT OF TRAILING	AMOUNT OF FLICKERING
10	0.325	0.5411
20	0.4	0.4671
30	0.475	0.3681
40	0.55	0.2524
50	0.625	0.1273

S FIXED AT 60%

FIG. 89

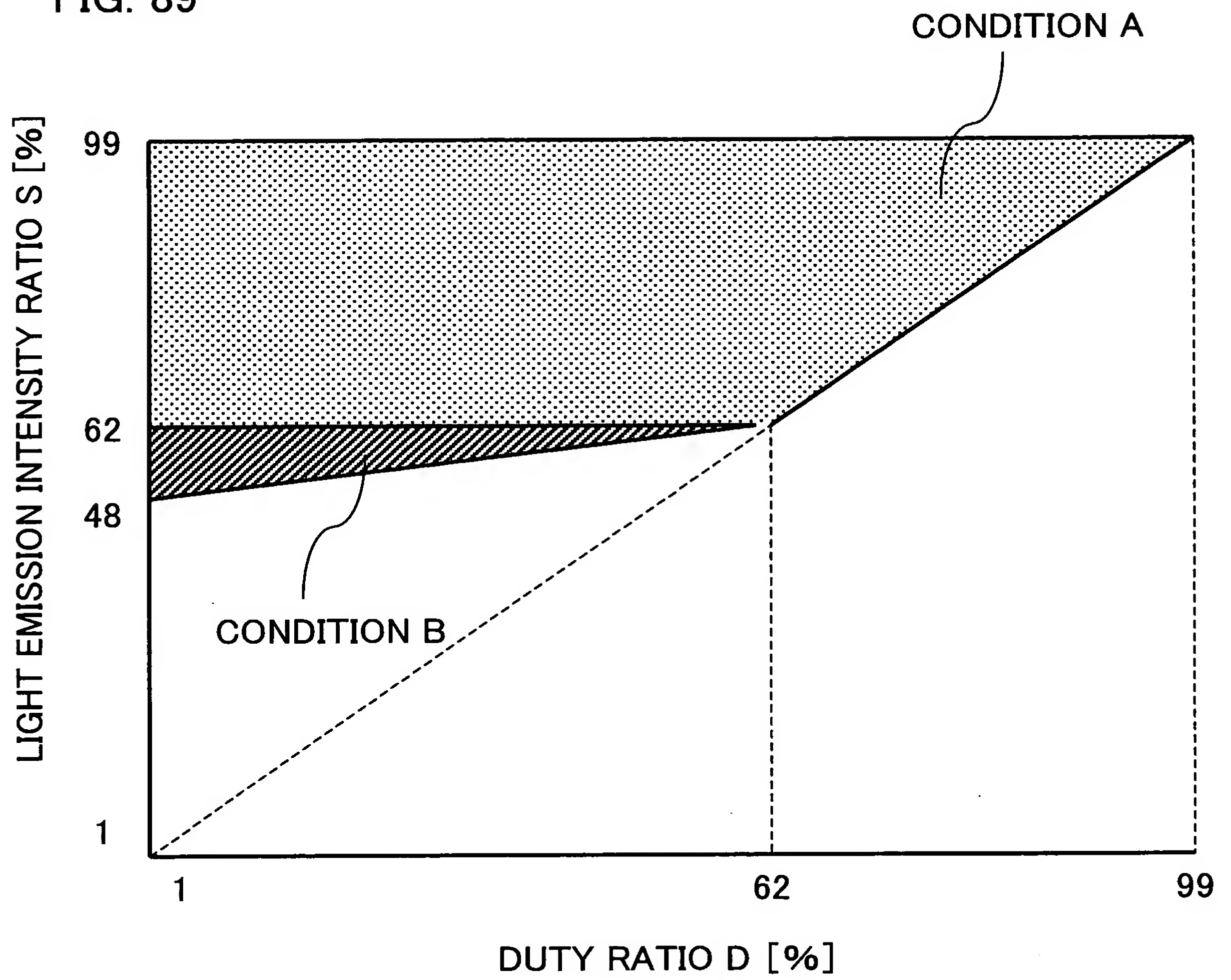


FIG. 90(a)

RELATIONSHIP BETWEEN AMOUNTS OF TRAILING AND FLICKERING

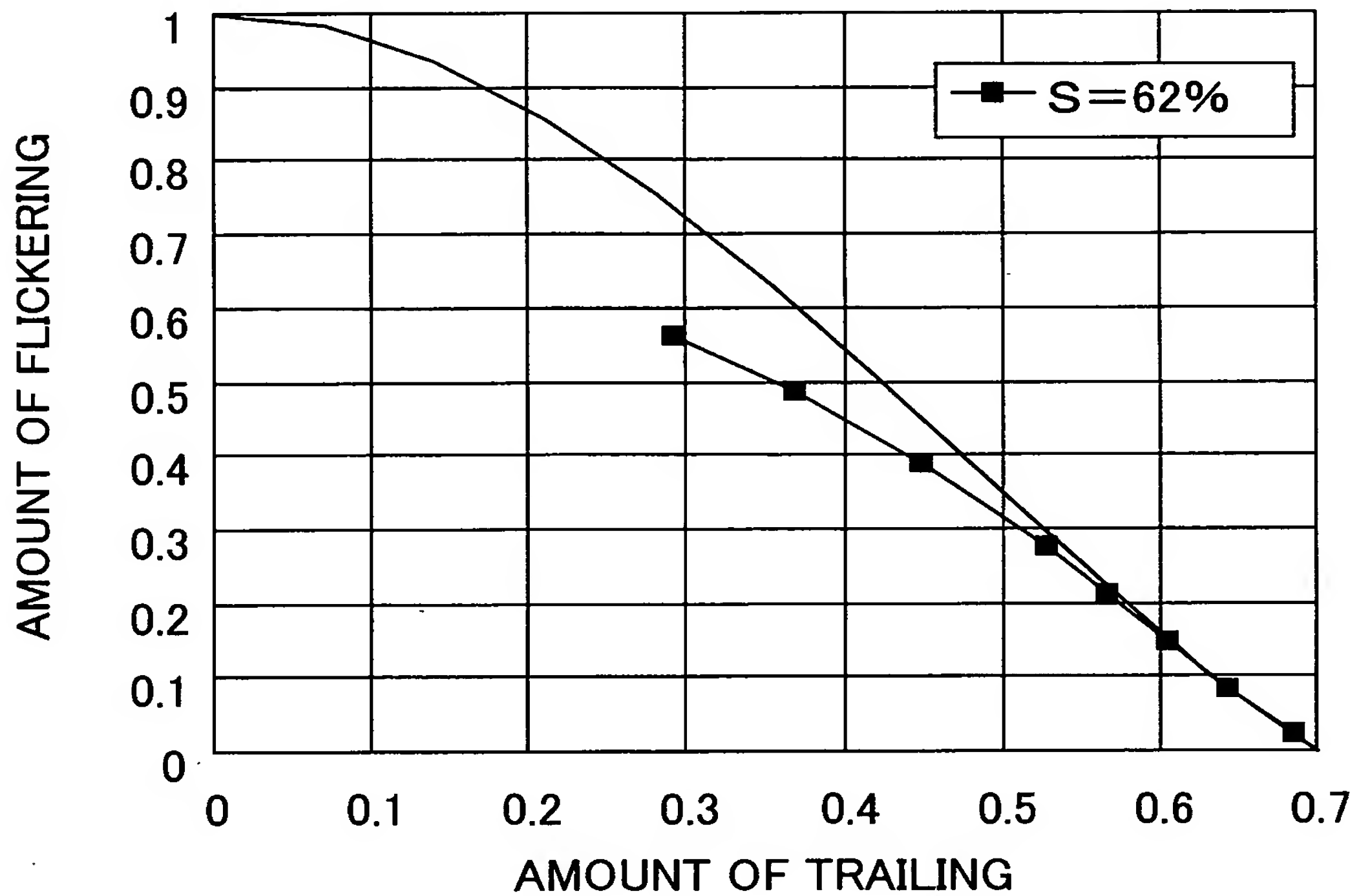


FIG. 90(b)

DUTY RATIO D	AMOUNT OF TRAILING	AMOUNT OF FLICKERING
10	0.29	0.56
20	0.37	0.49
30	0.45	0.39
40	0.53	0.28
45	0.57	0.22
50	0.60	0.15
55	0.64	0.09
60	0.68	0.03

S FIXED AT 62%

FIG. 91 (a)

RELATIONSHIP BETWEEN AMOUNTS OF TRAILING AND FLICKERING

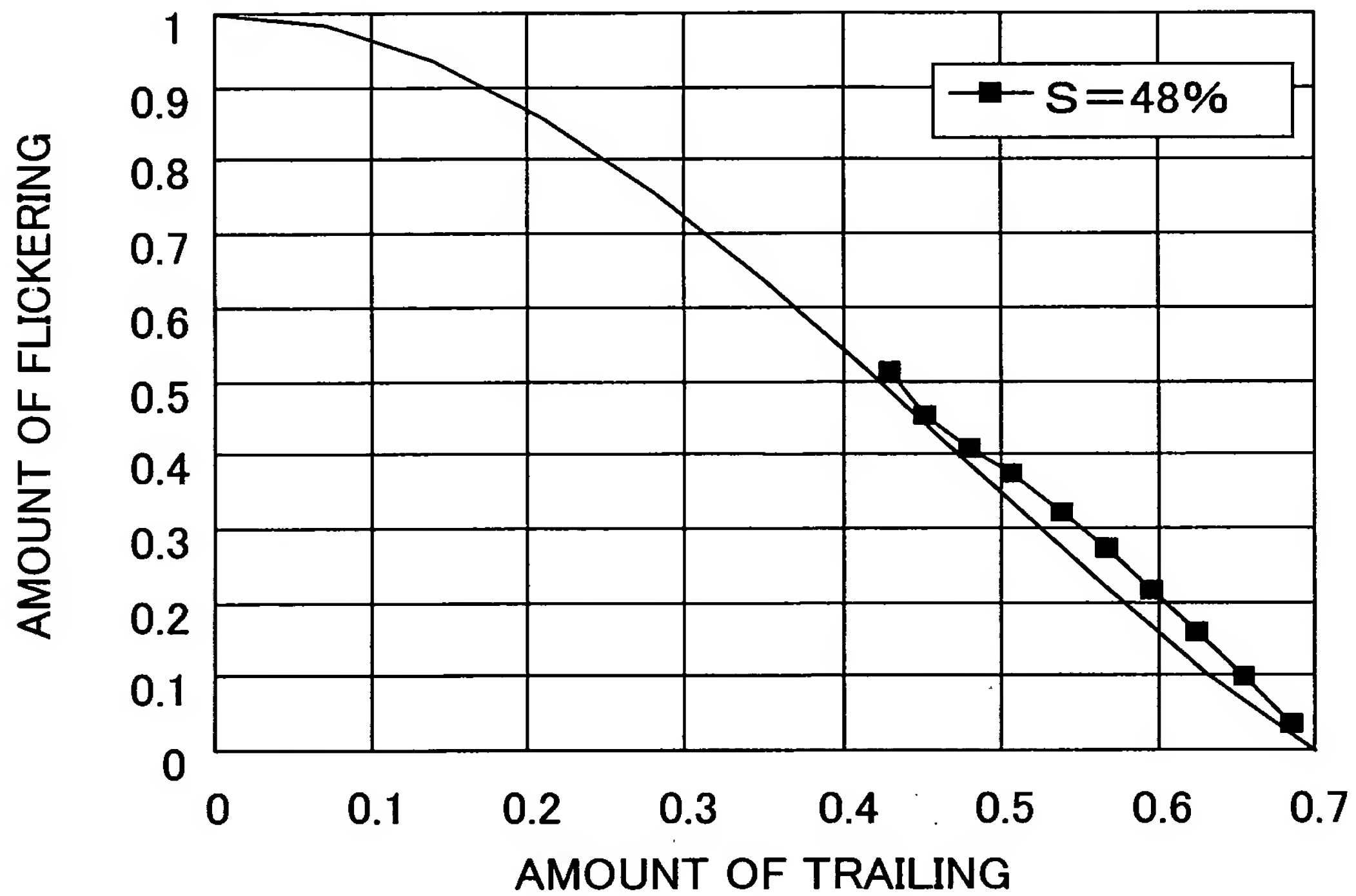


FIG. 91 (b)

DUTY RATIO D	AMOUNT OF TRAILING	AMOUNT OF FLICKERING
1	0.43	0.51
5	0.45	0.45
10	0.48	0.41
15	0.51	0.38
20	0.54	0.33
25	0.57	0.28
30	0.60	0.22
35	0.62	0.16
40	0.65	0.10
45	0.68	0.04

S FIXED AT 48%

FIG. 92(a)

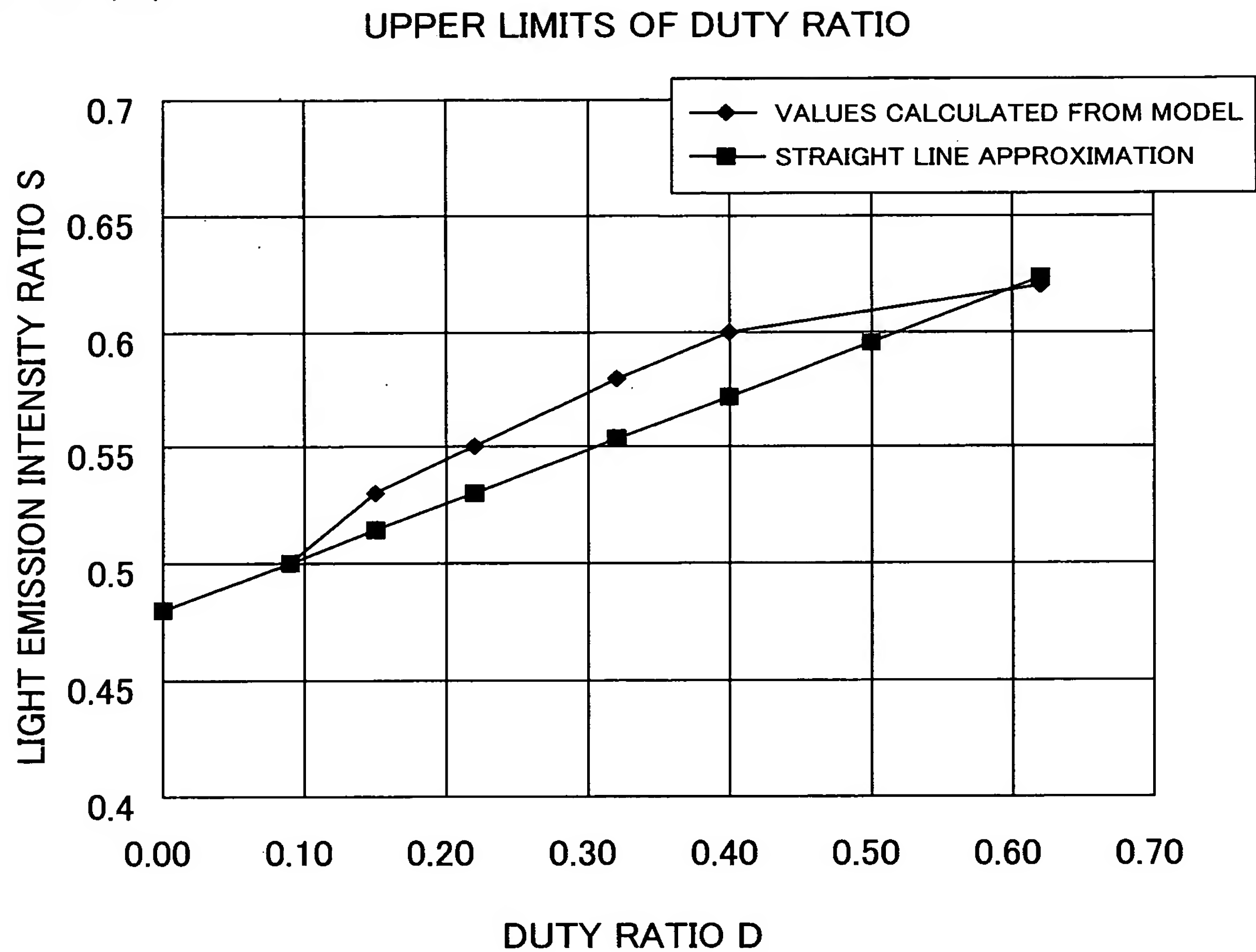


FIG. 92 (b)

DUTY RATIO D	LIGHT EMISSION INTENSITY RATIO S
0.09	0.5
0.15	0.53
0.22	0.55
0.32	0.58
0.4	0.6
0.619	0.62

VALUES CALCULATED FROM MODEL

FIG. 93(a)

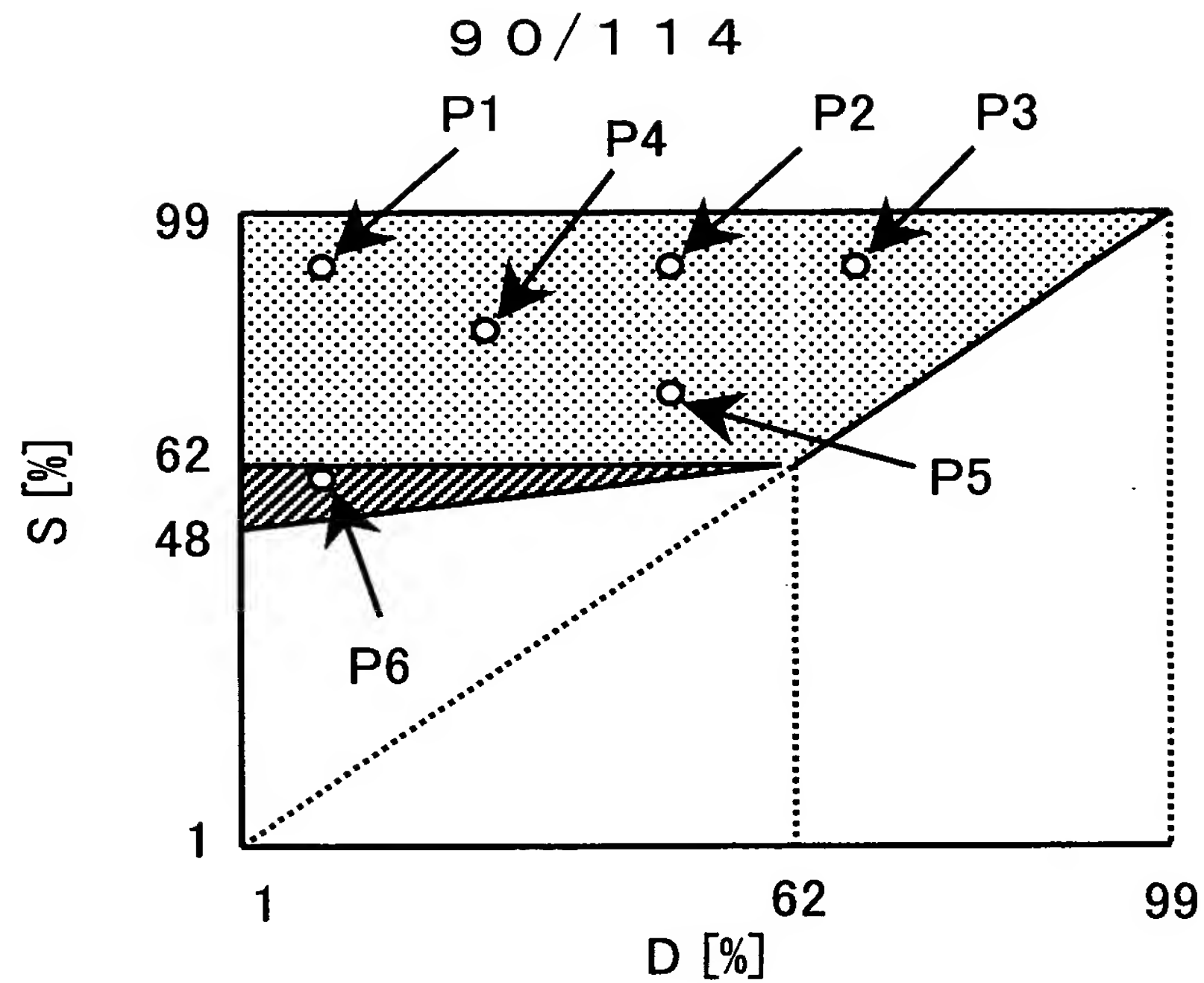


FIG. 93(b)

POINT	D (%)	S (%)	AMOUNT OF TRAILING	AMOUNT OF FLICKERING
P1	0.1	0.9	0.08	0.87
P2	0.5	0.9	0.39	0.51
P3	0.7	0.9	0.54	0.25
P4	0.3	0.8	0.26	0.61
P5	0.5	0.7	0.5	0.25
P6	0.1	0.6	0.33	0.54

FIG. 93(c)

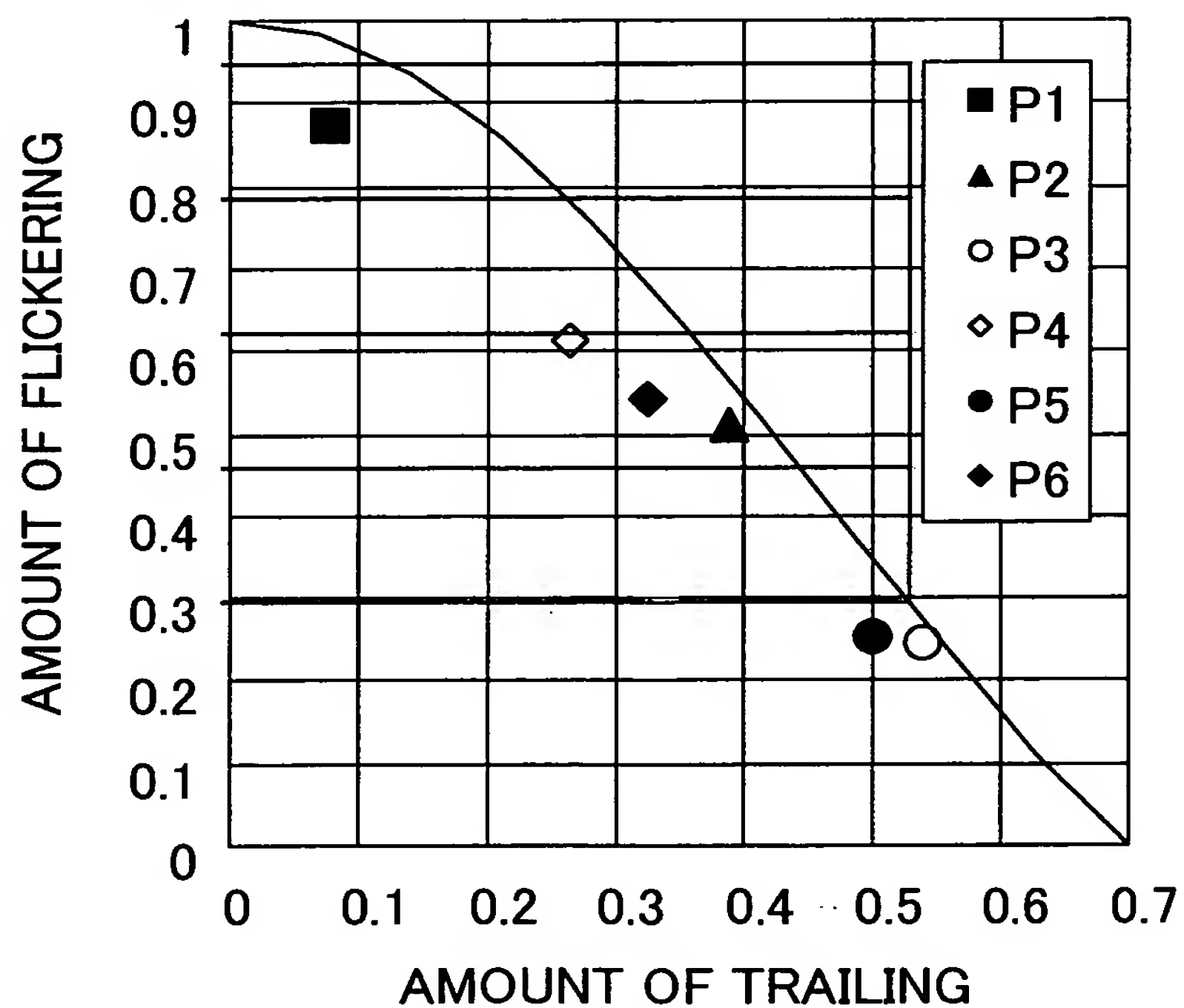


FIG. 94(a)

INSTANTANEOUS LIGHT
EMISSION INTENSITY

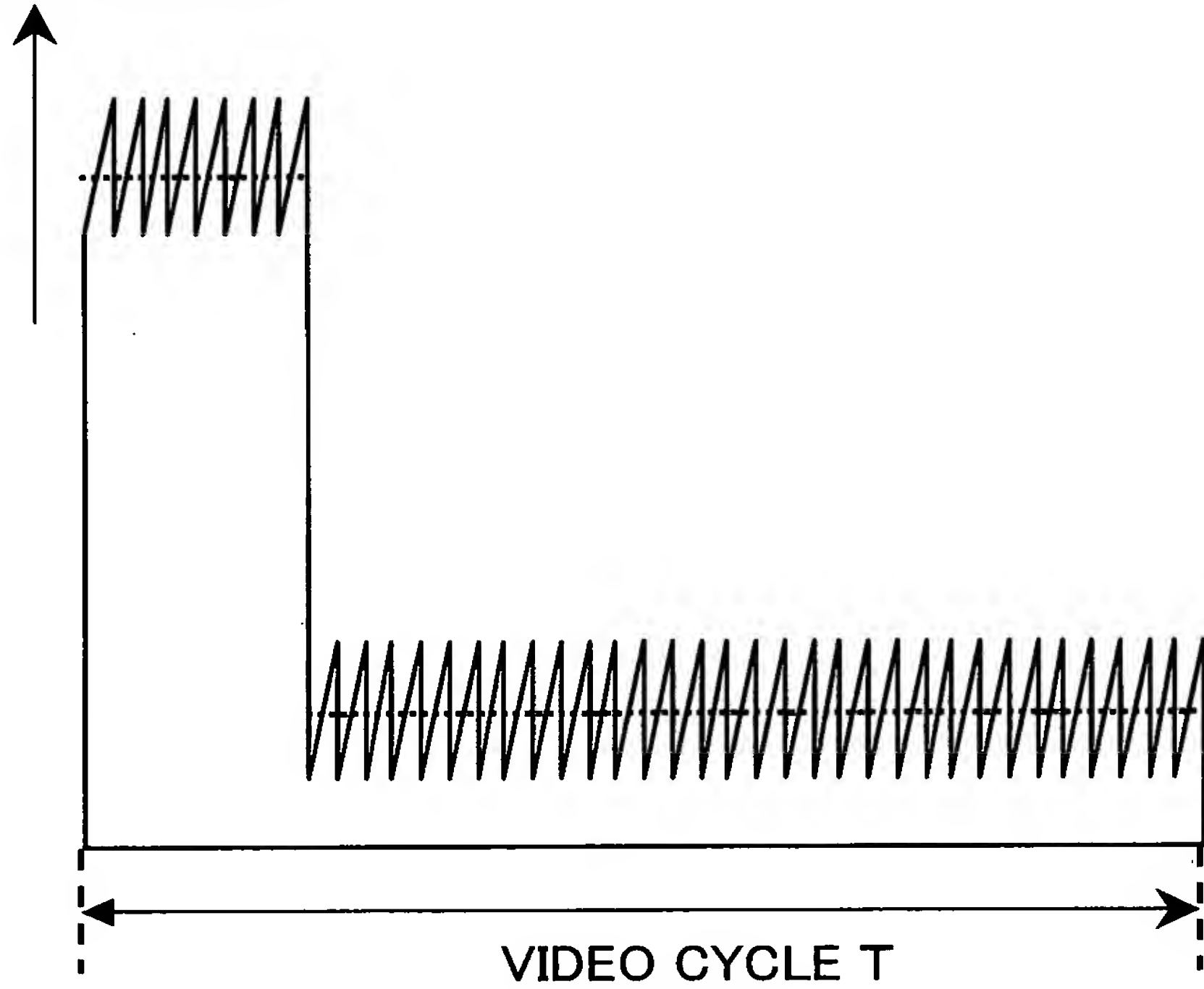


FIG. 94(b)

INSTANTANEOUS LIGHT
EMISSION INTENSITY

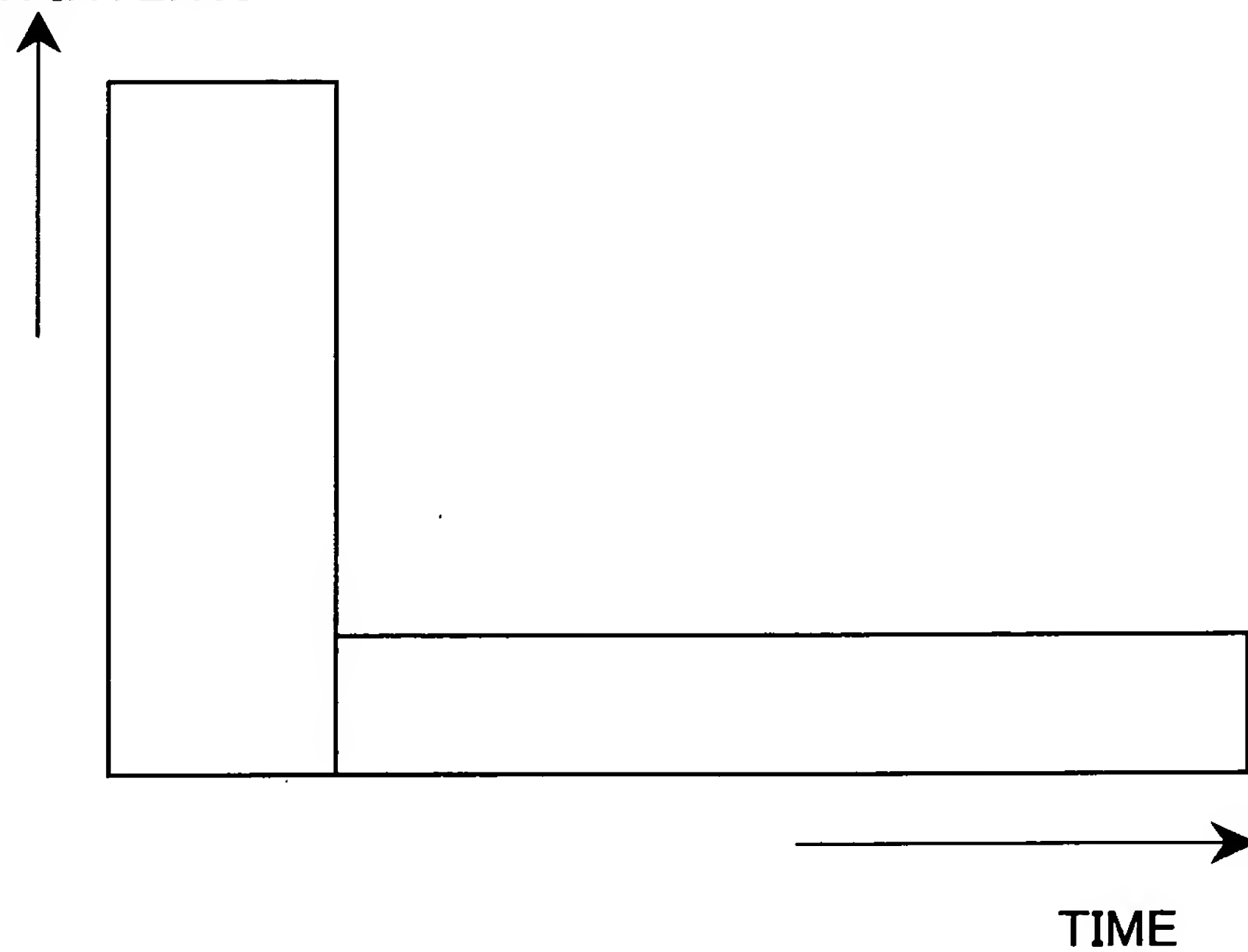


FIG. 95(a)

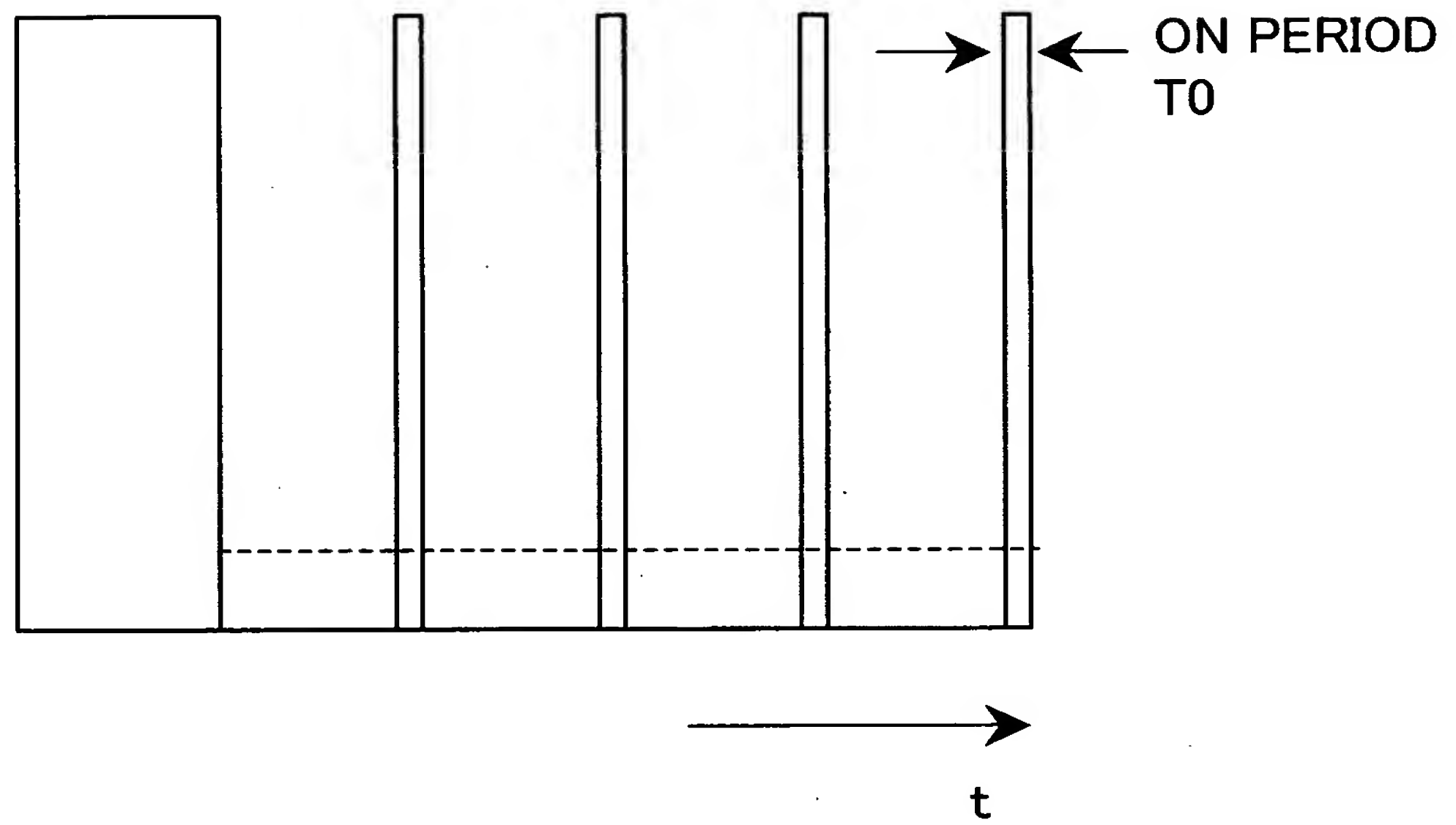
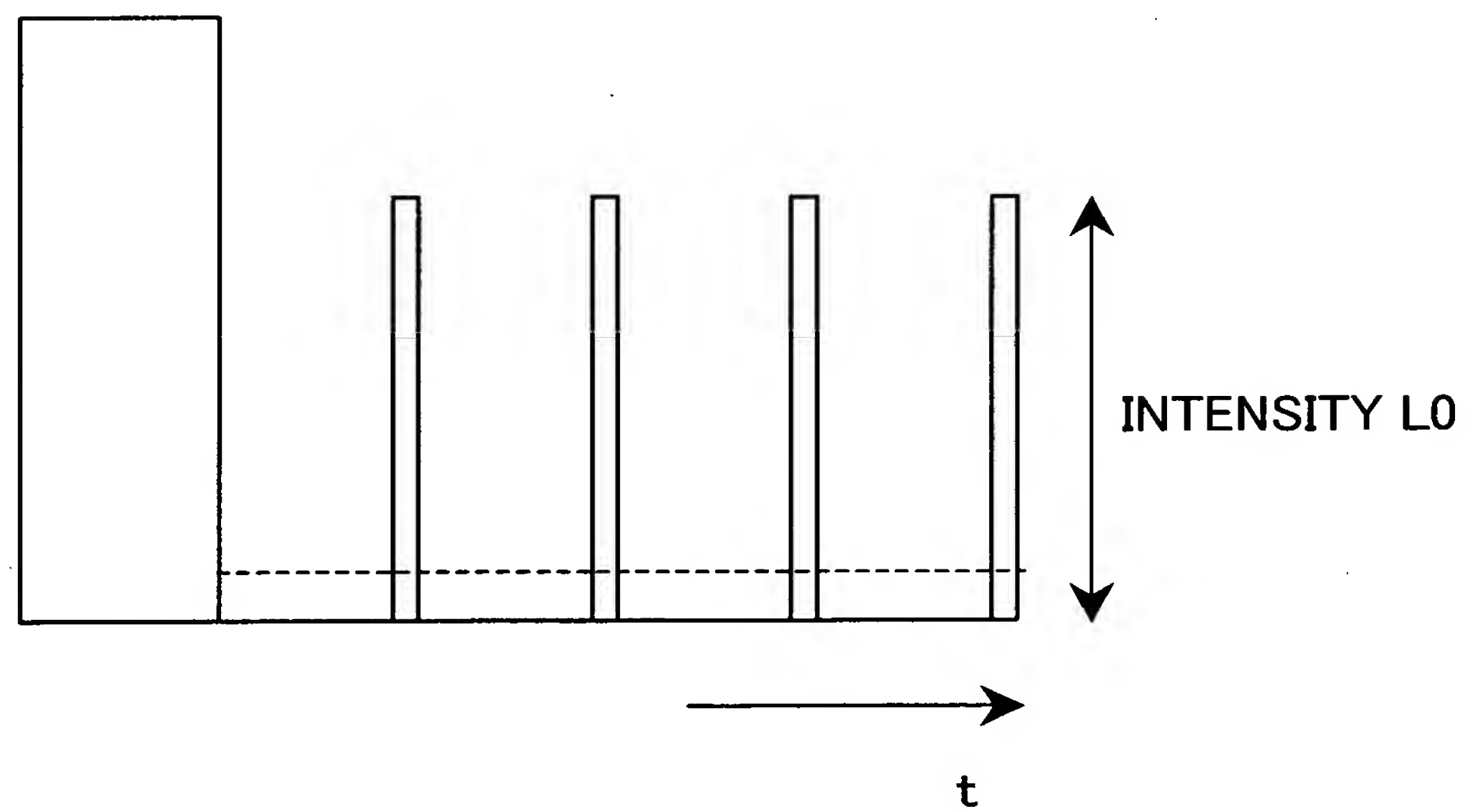


FIG. 95(b)



9 3 / 1 1 4

FIG. 96

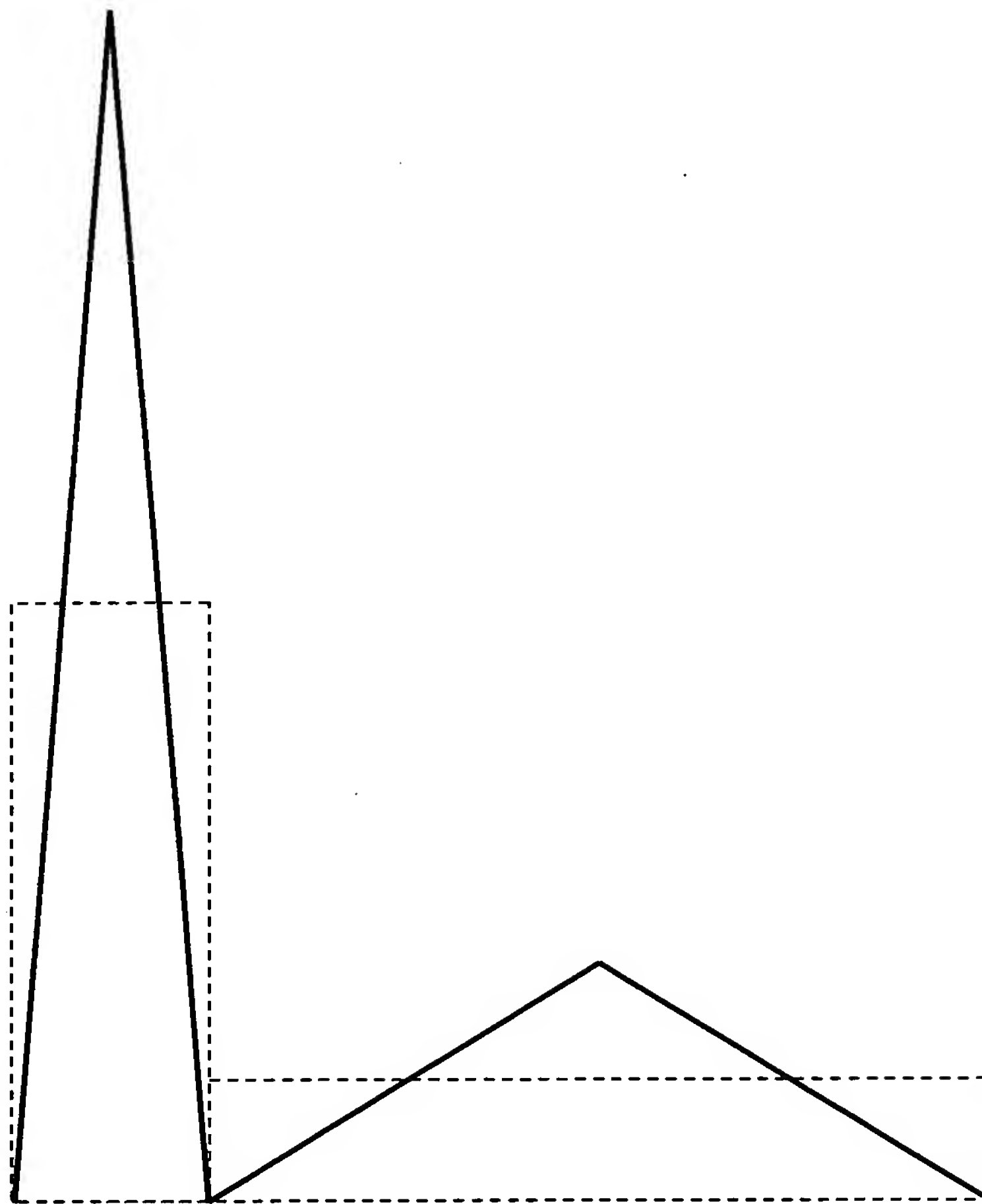


FIG. 97

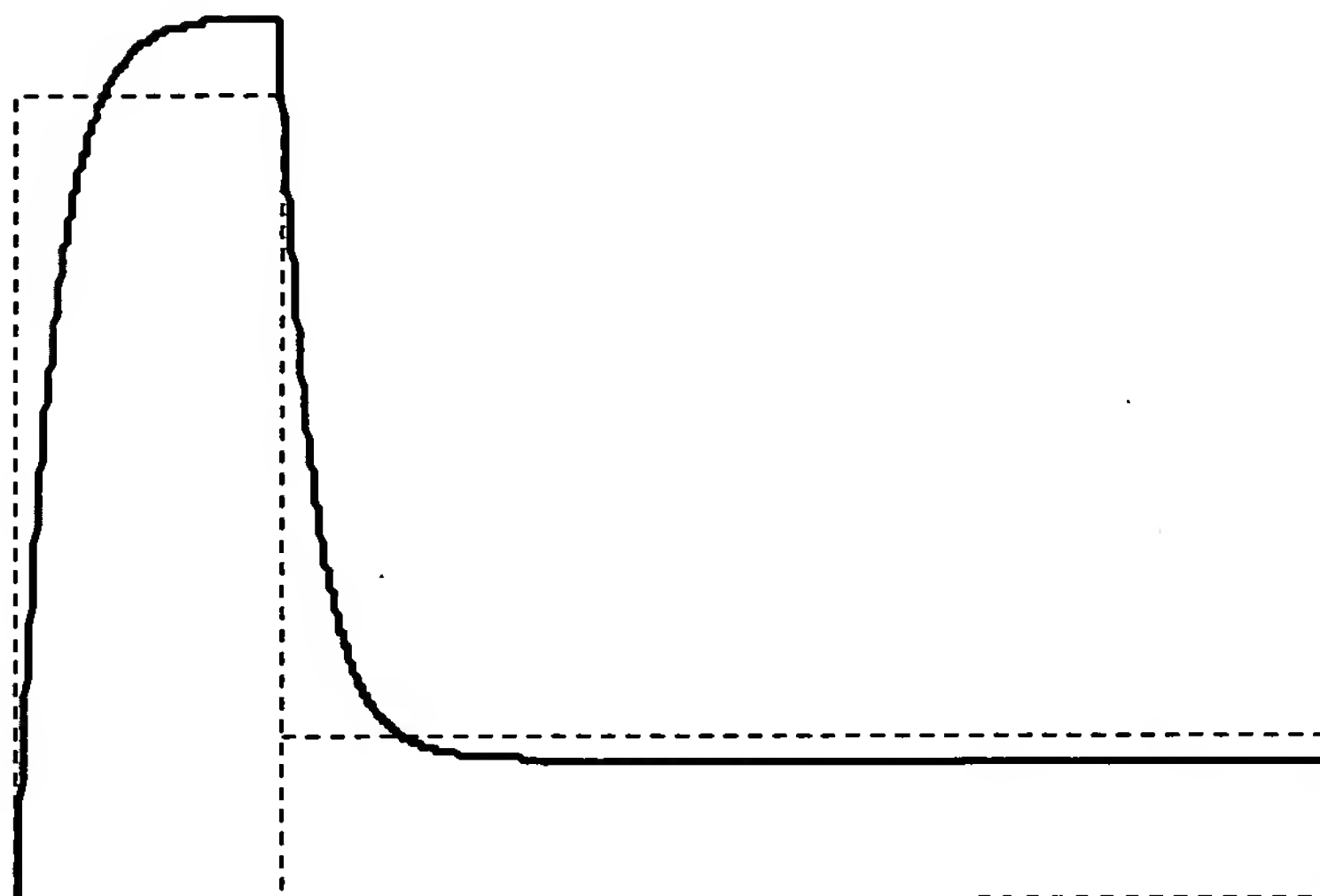


FIG. 98

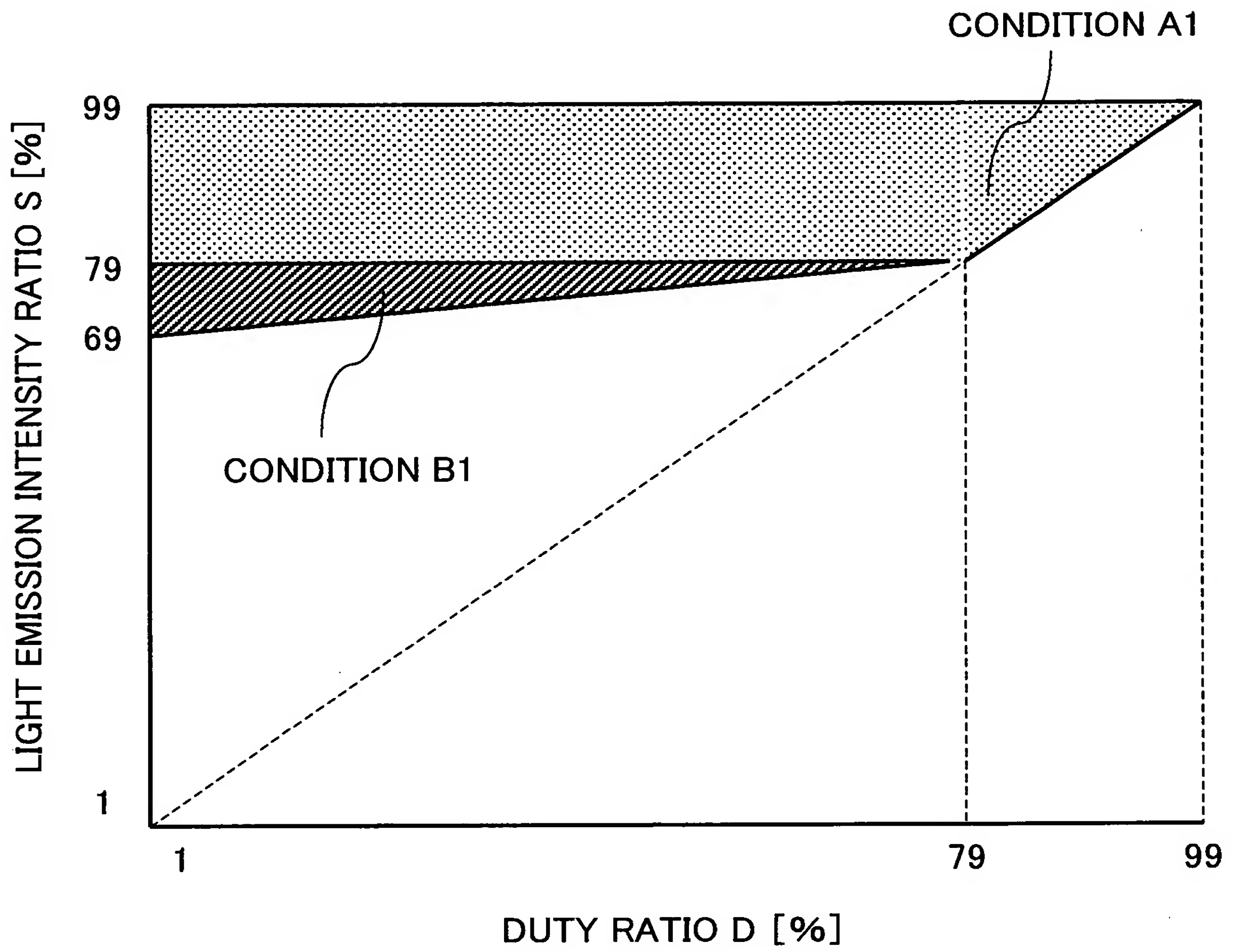


FIG. 99(a)

RELATIONSHIP BETWEEN AMOUNTS OF TRAILING AND FLICKERING

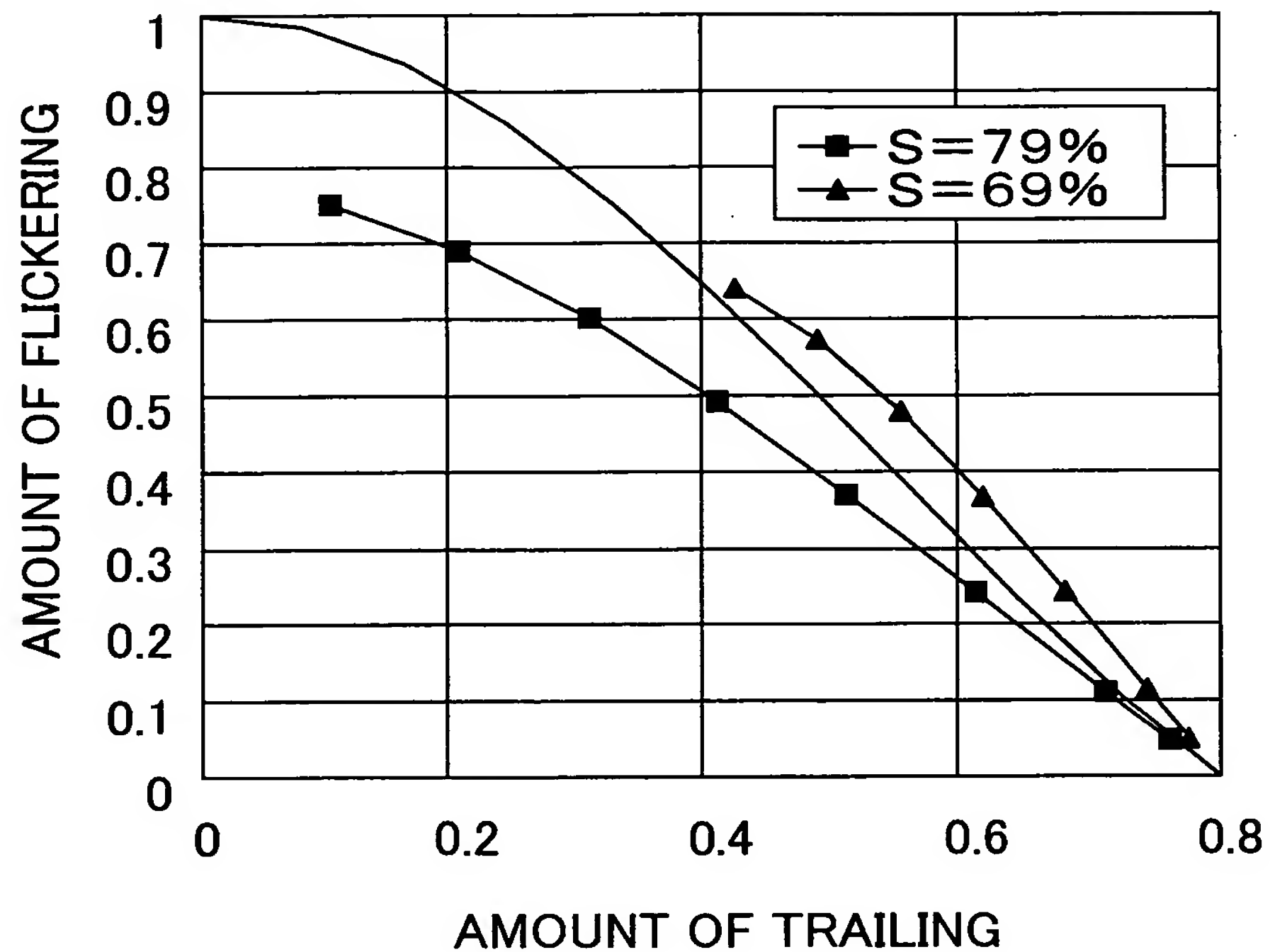


FIG. 99(b)

DUTY RATIO D	AMOUNT OF TRAILING	AMOUNT OF FLICKERING
10	0.42	0.64
20	0.48	0.57
30	0.55	0.48
40	0.61	0.37
50	0.68	0.24
60	0.74	0.11
65	0.77	0.05

S FIXED AT 69%

FIG. 99(c)

DUTY RATIO D	AMOUNT OF TRAILING	AMOUNT OF FLICKERING
10	0.10	0.75
20	0.20	0.69
30	0.30	0.60
40	0.41	0.49
50	0.51	0.37
60	0.61	0.24
70	0.71	0.11
75	0.76	0.05

S FIXED AT 79%

FIG. 100(a)

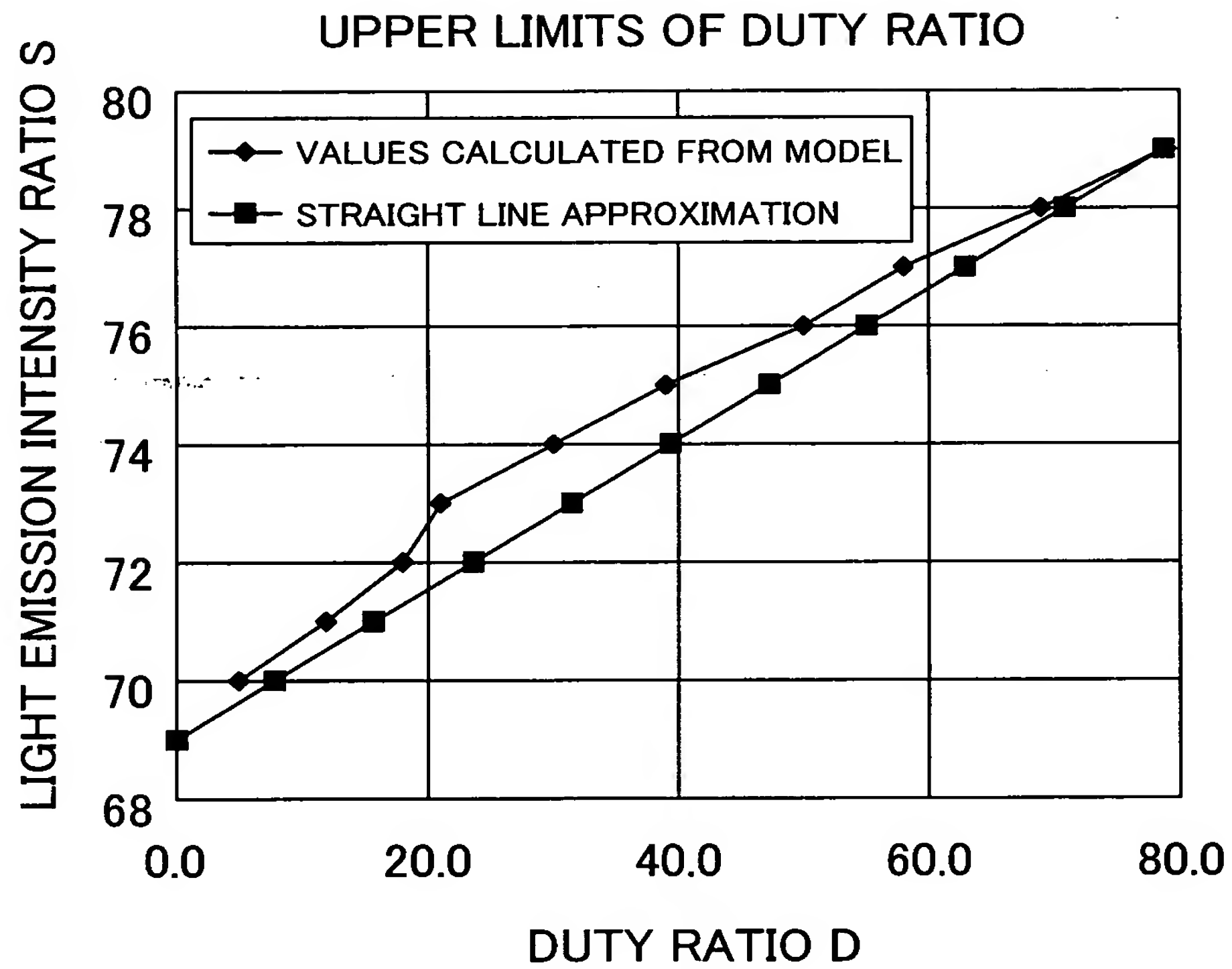


FIG. 100(b)

LIGHT EMISSION INTENSITY RATIO S	DUTY RATIO D
70	5.0
71	12.0
72	18.0
73	21.0
74	30.0
75	39.0
76	50.0
77	58.0
78	69.0
79	78.9

VALUES CALCULATED FROM MODEL

FIG. 101

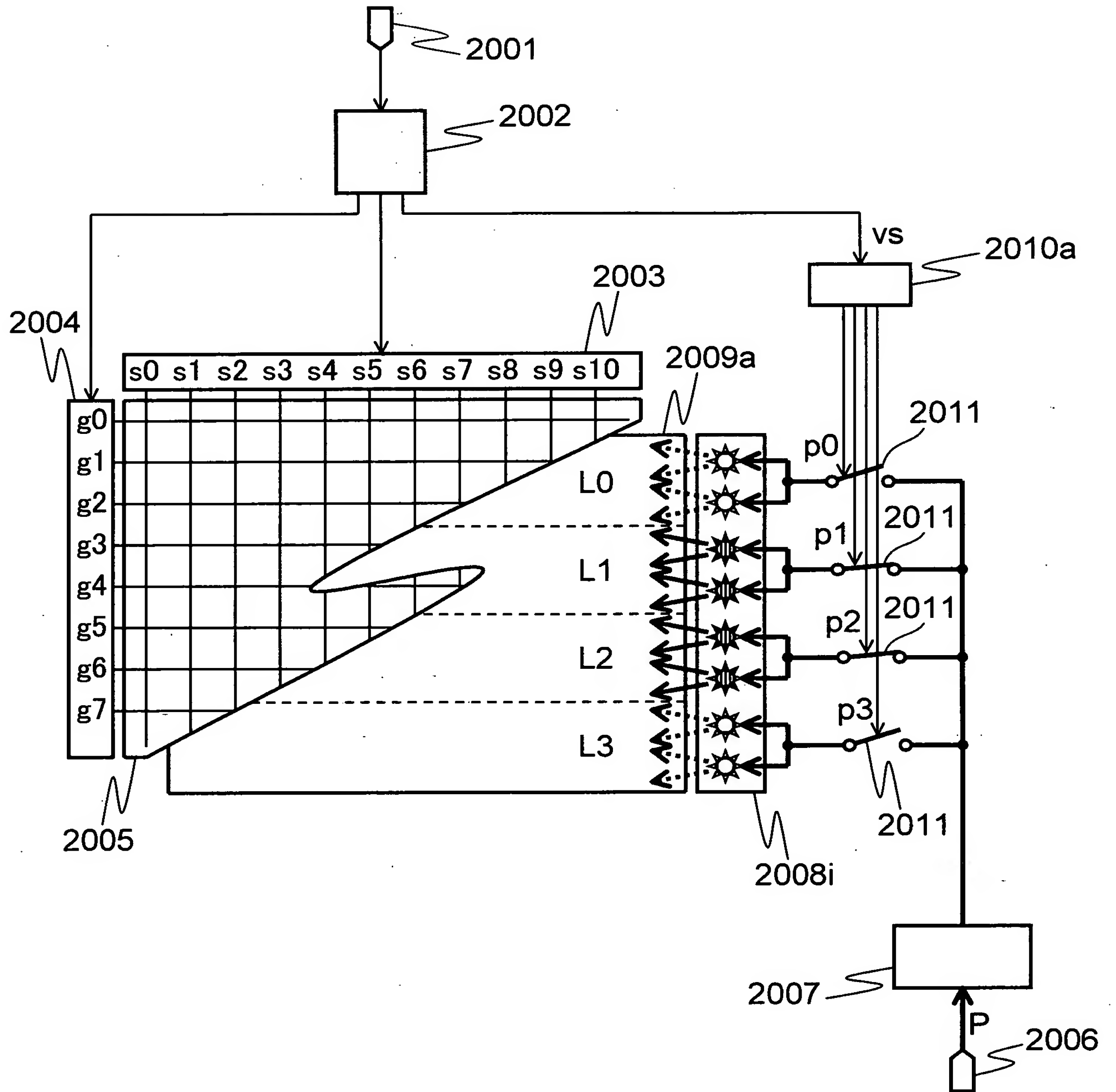


FIG. 102

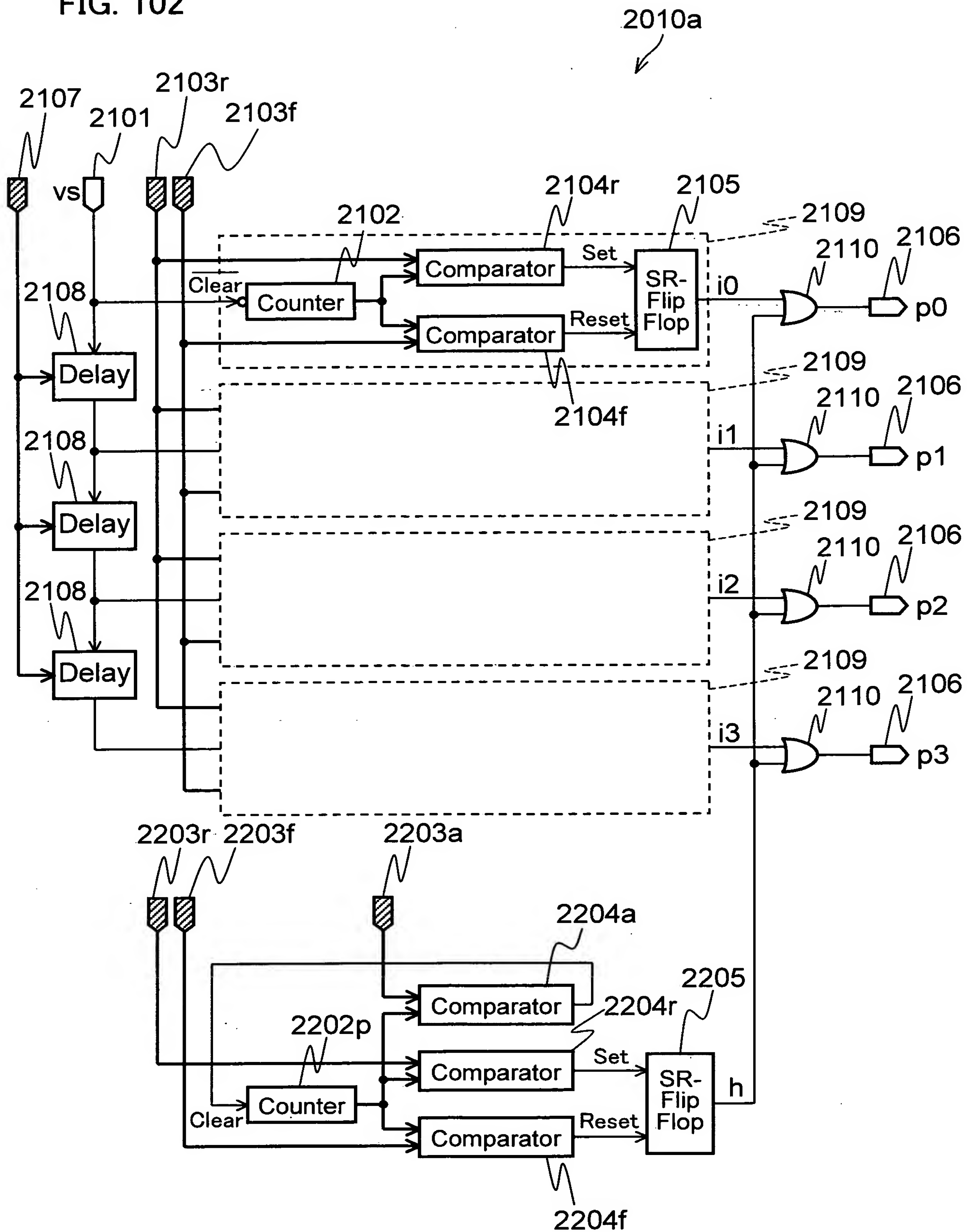


FIG. 103

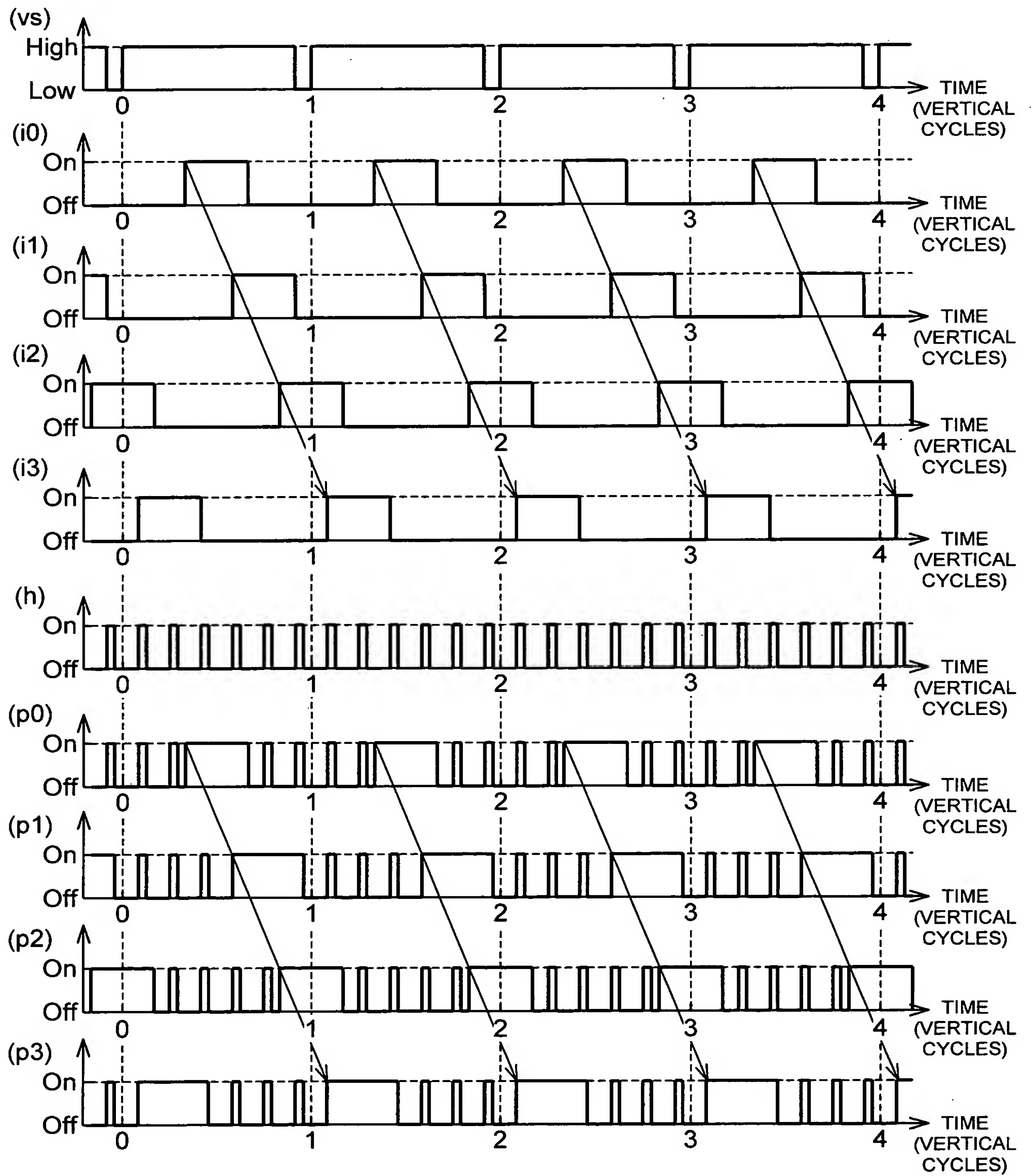


FIG. 104

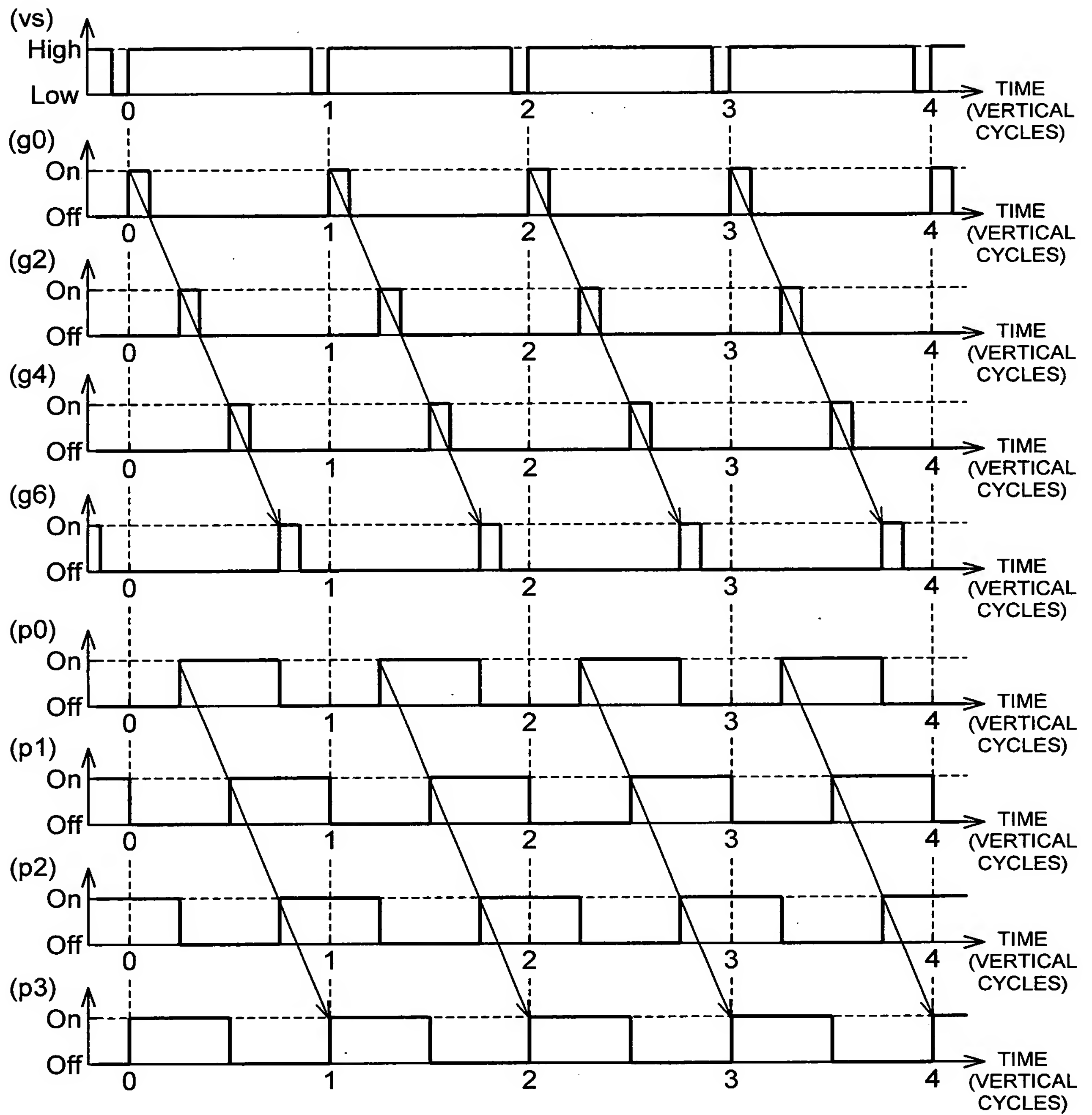


FIG. 105

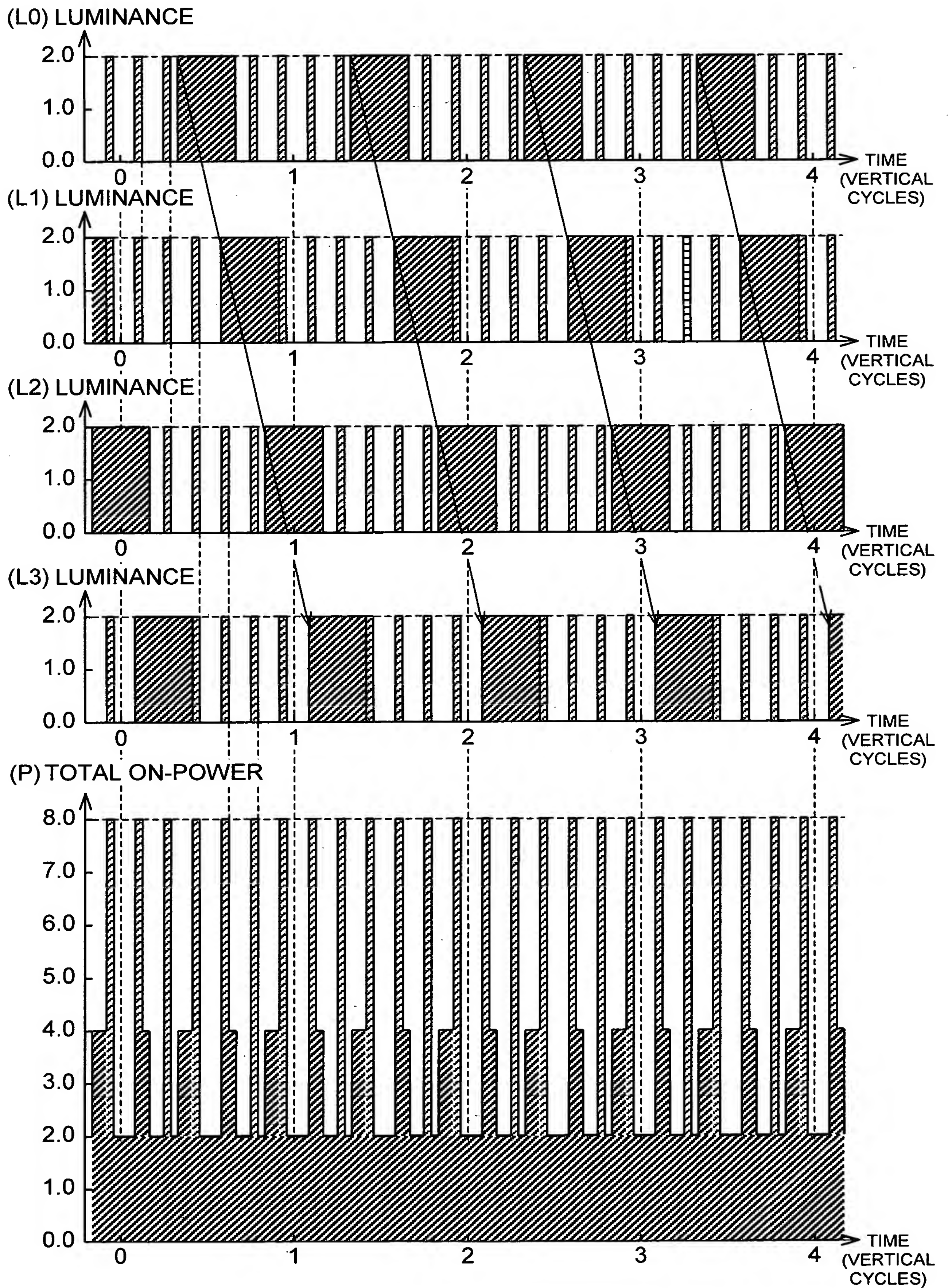


FIG. 106

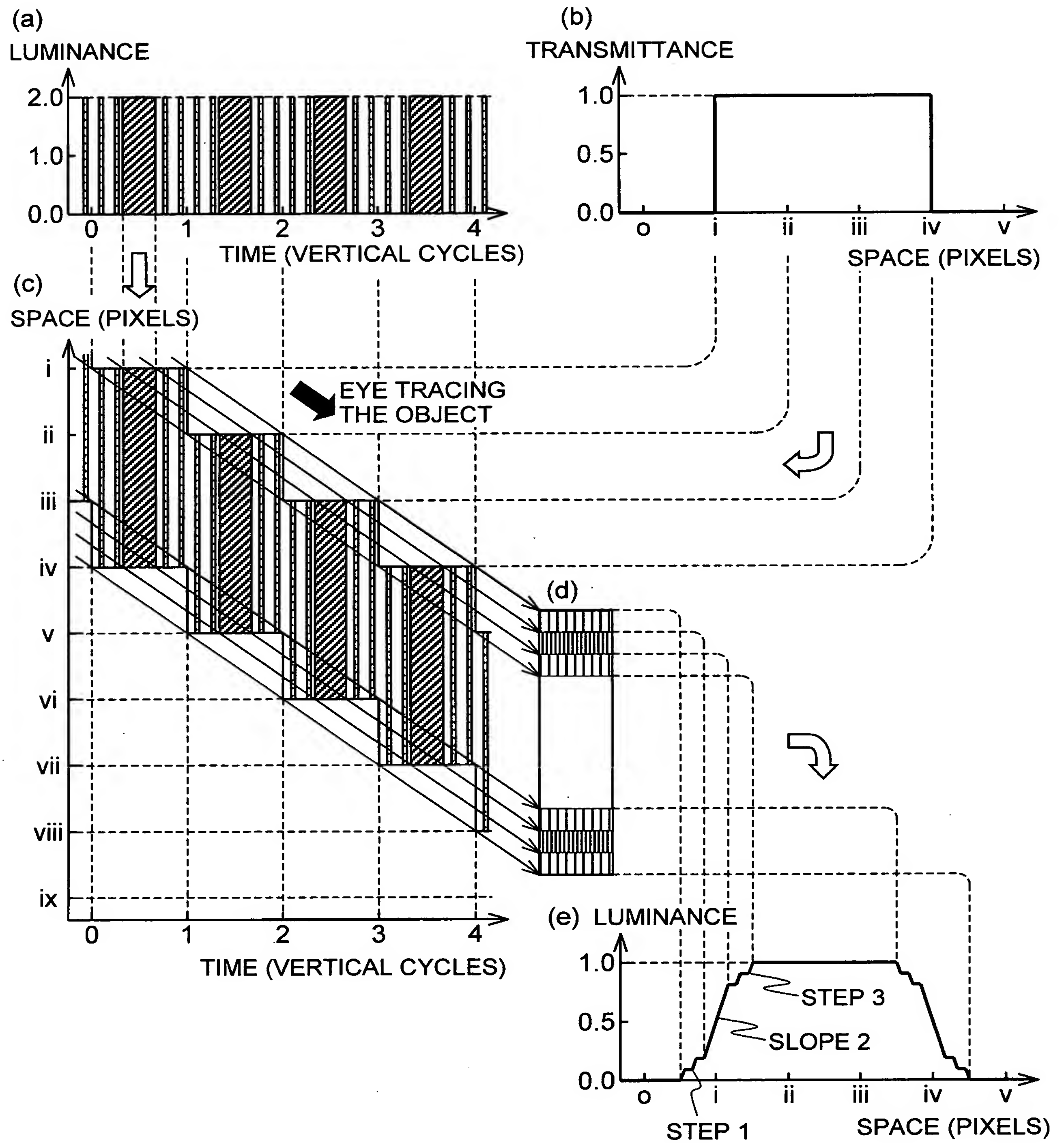
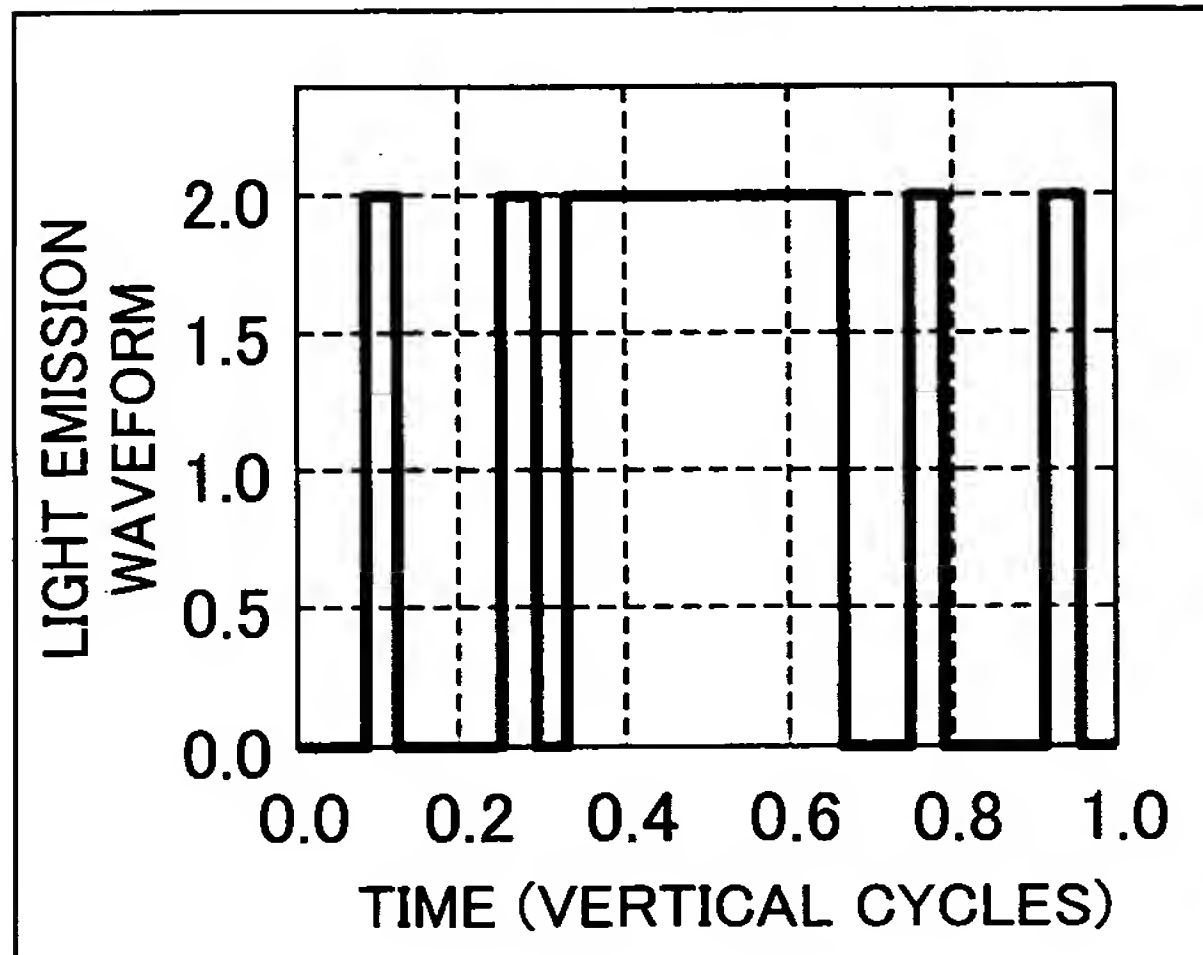
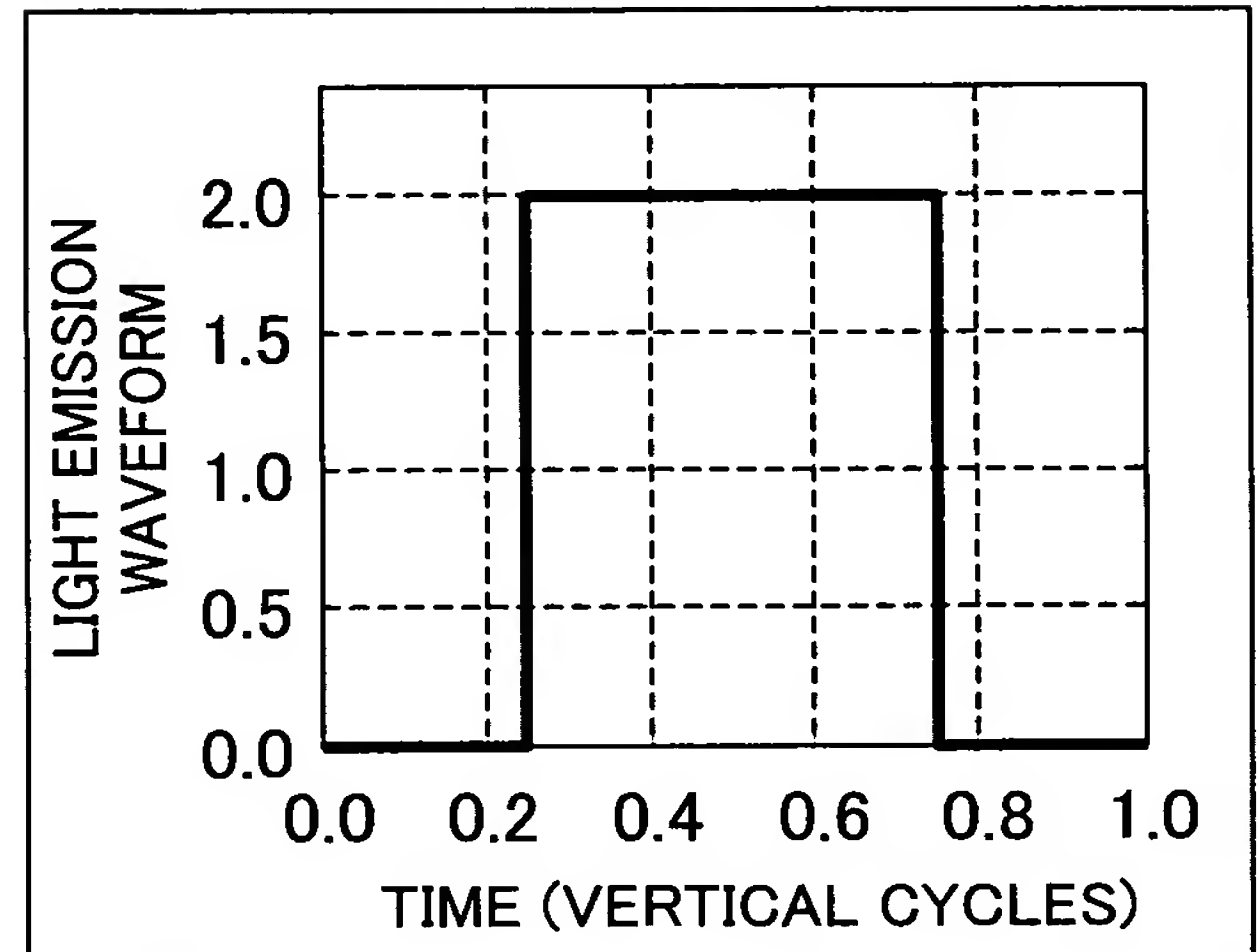


FIG. 107

(I) PRESENT EMBODIMENT



(II) CONVENTIONAL EXAMPLE



(III) HARMONIC COMPONENTS

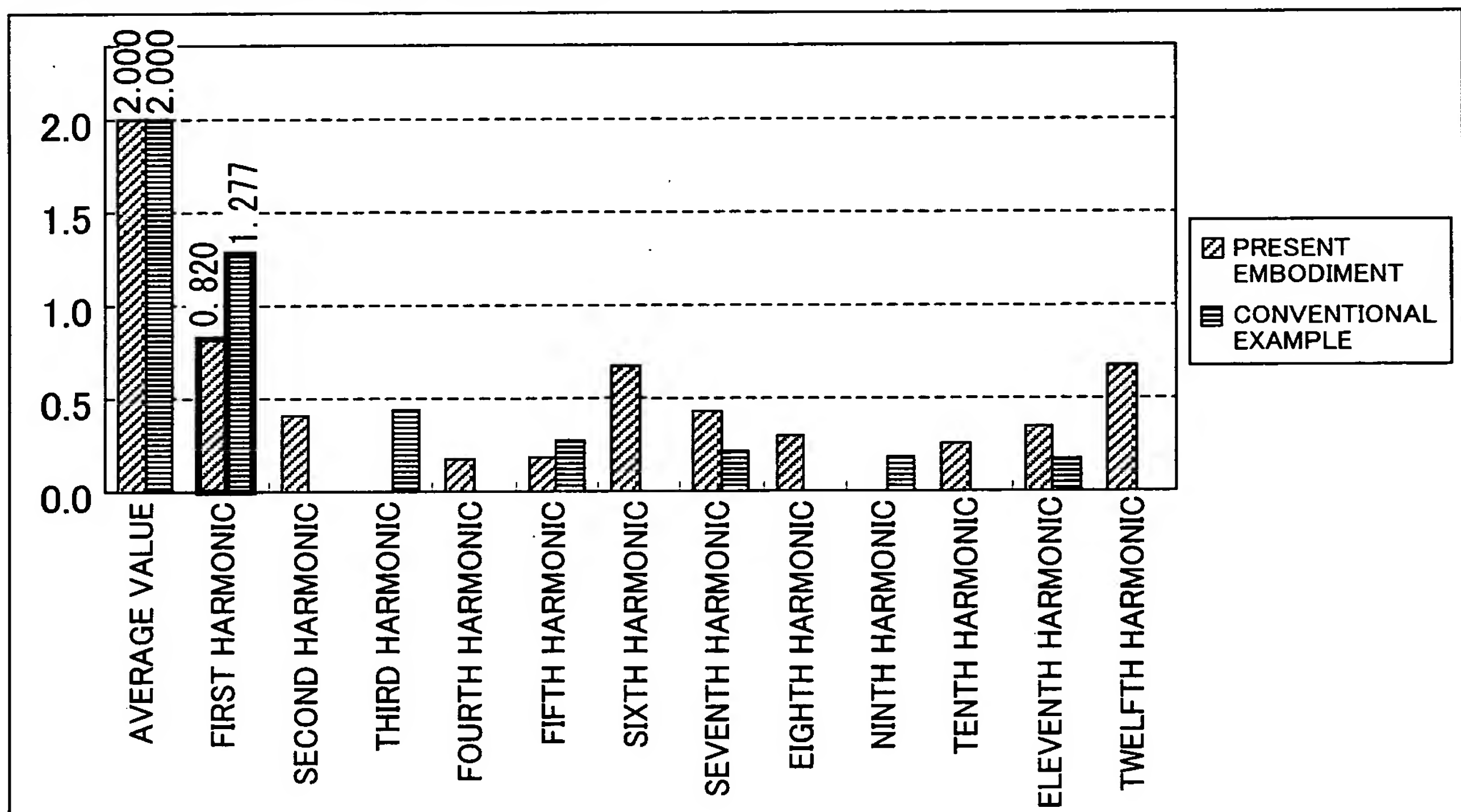


FIG. 108

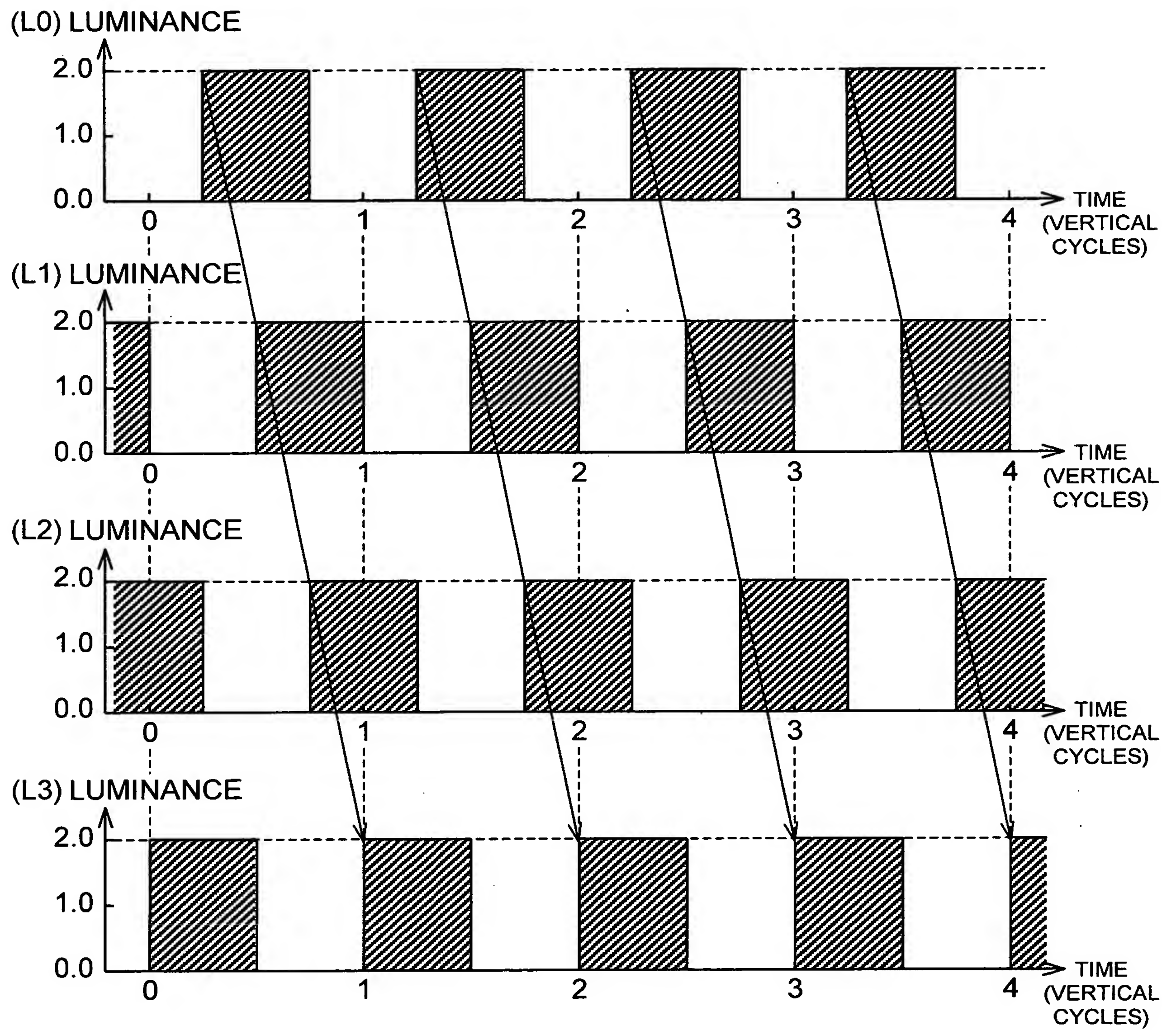


FIG. 109

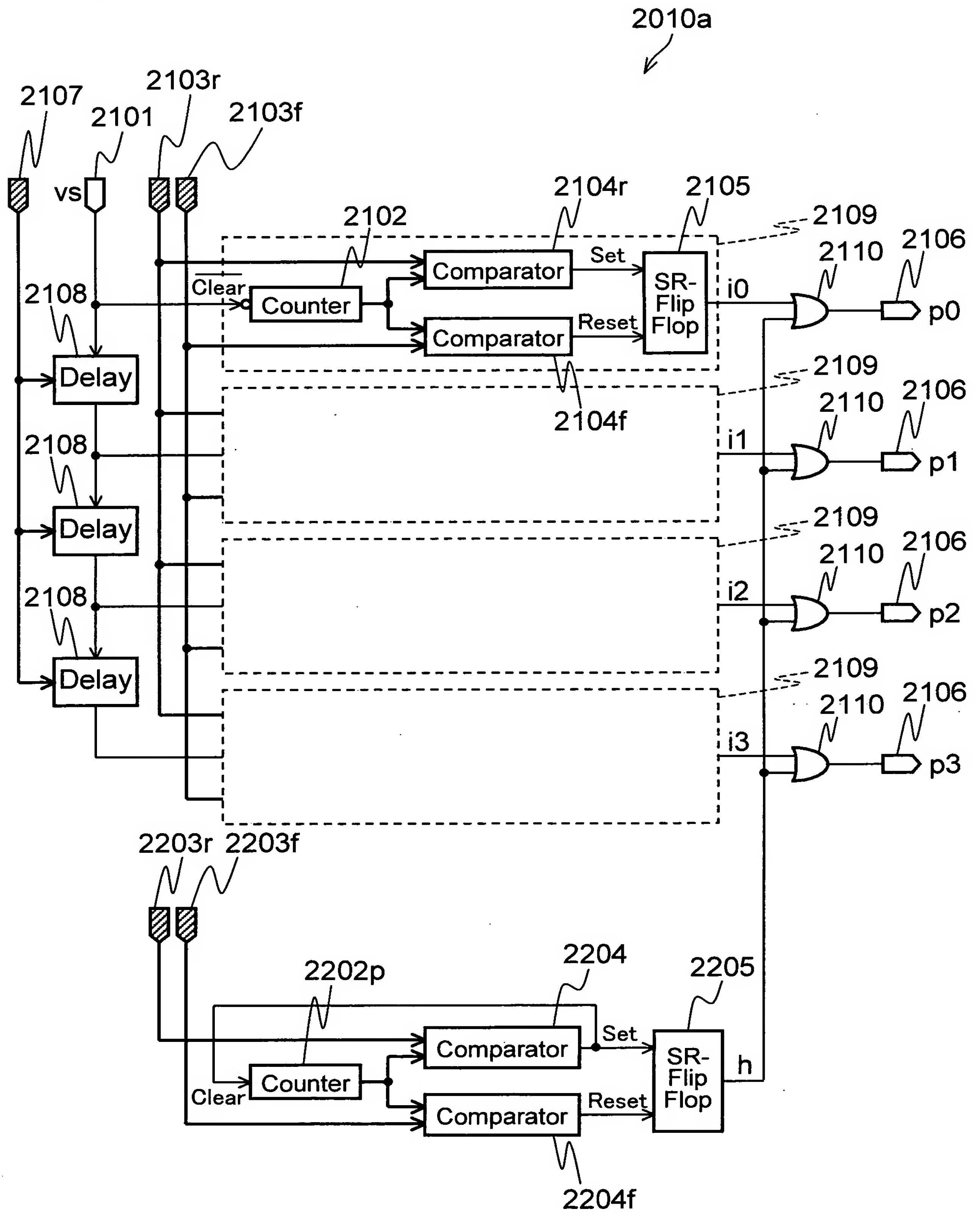


FIG. 110

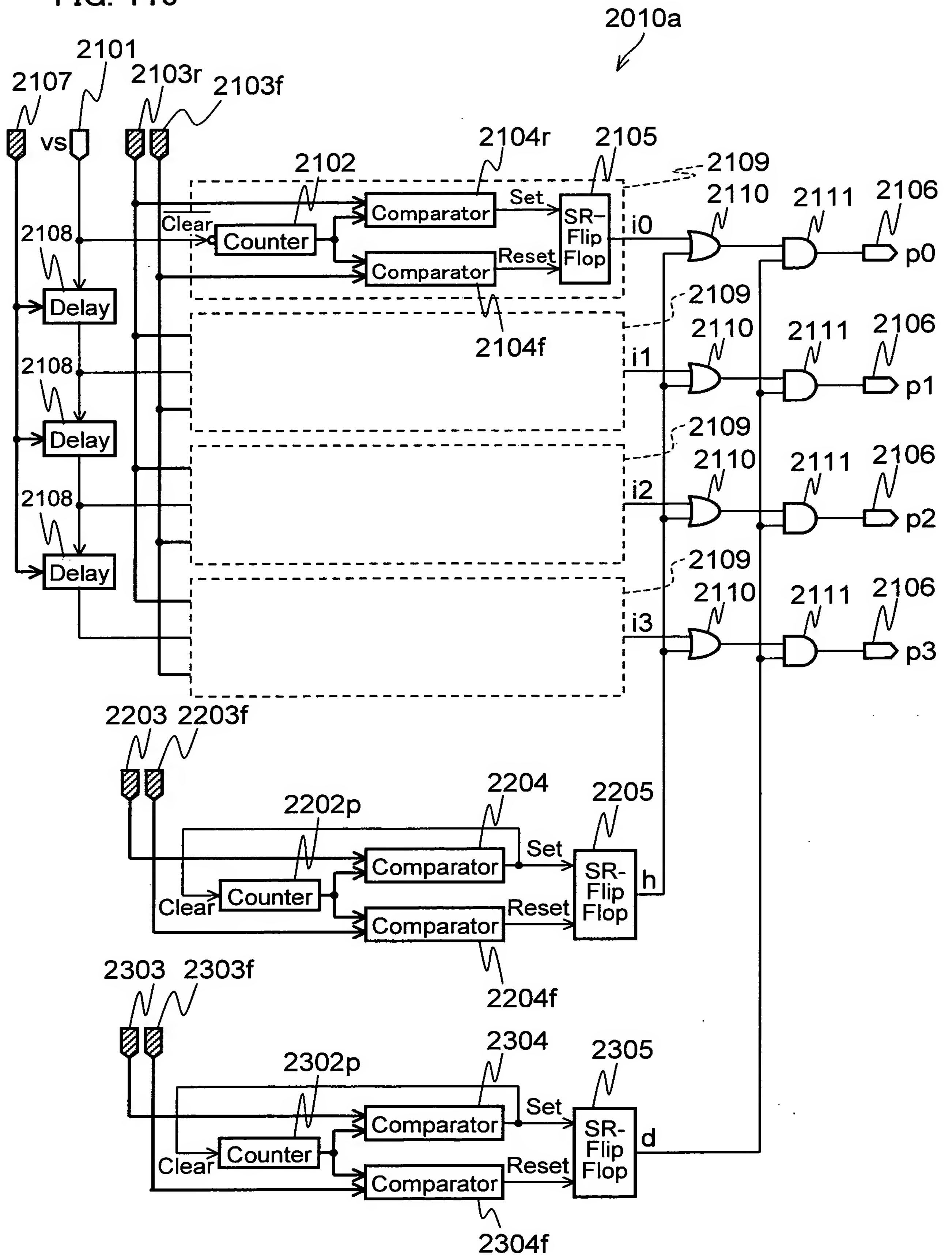


FIG. 111

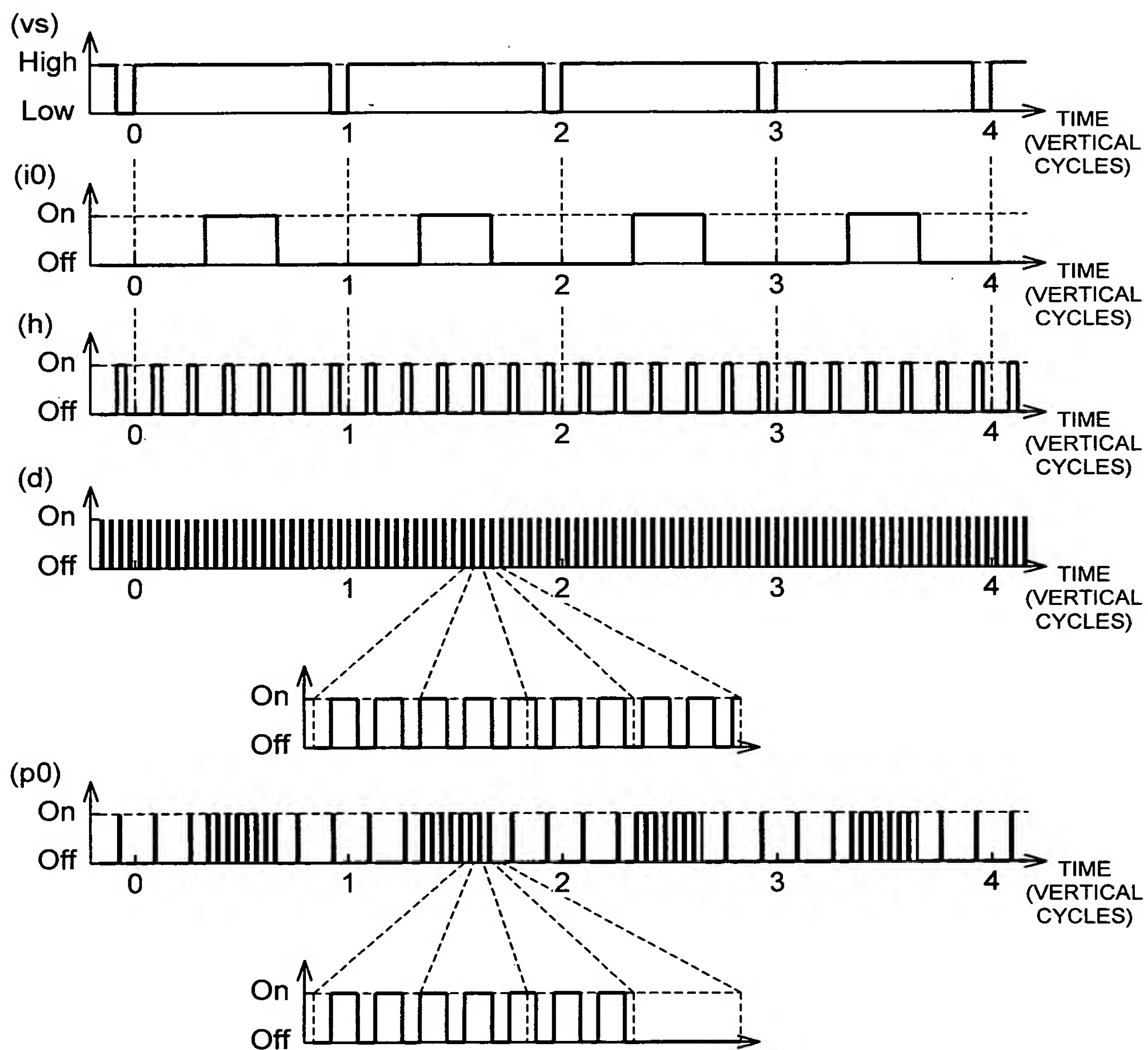


FIG. 112

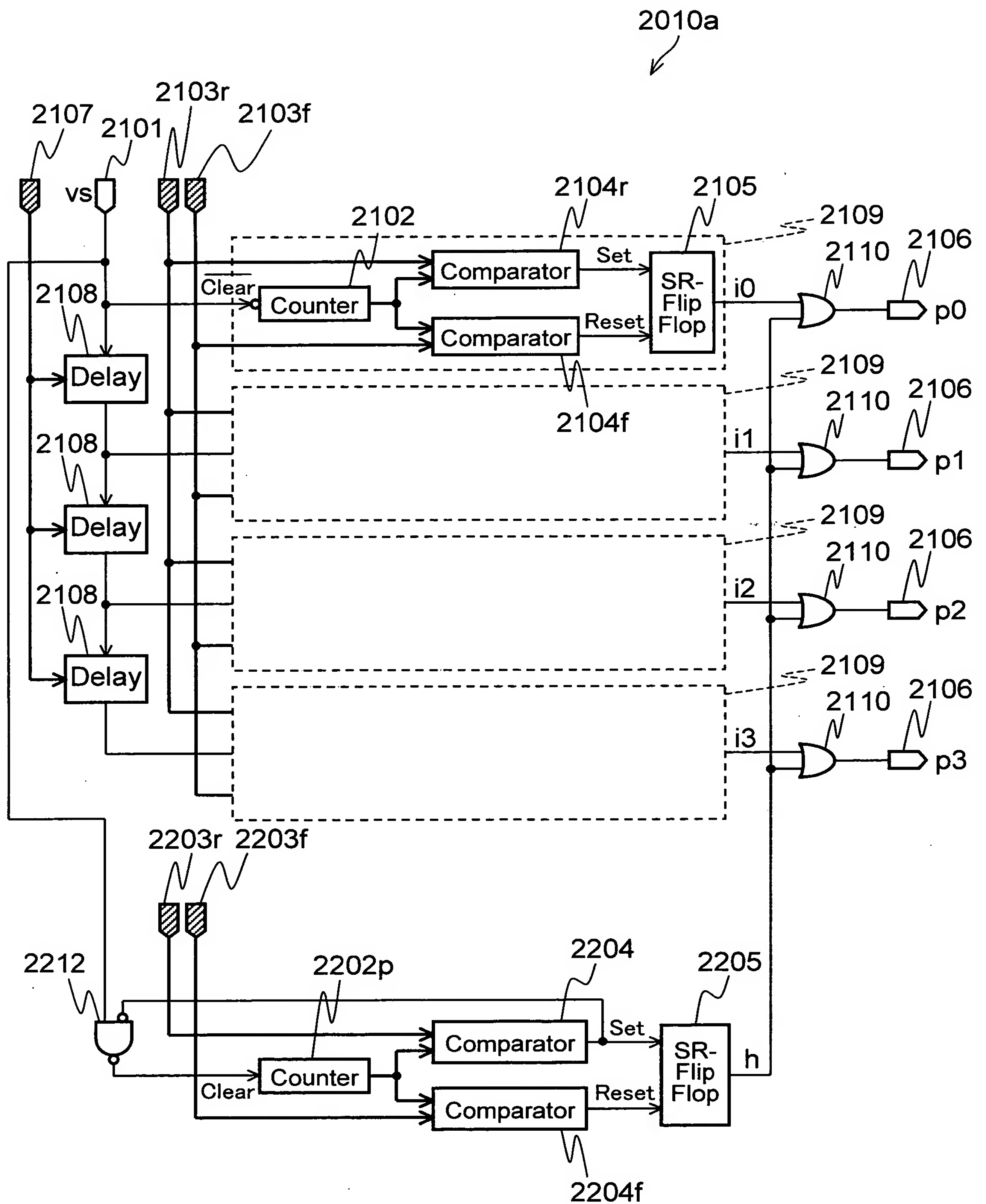


FIG. 113

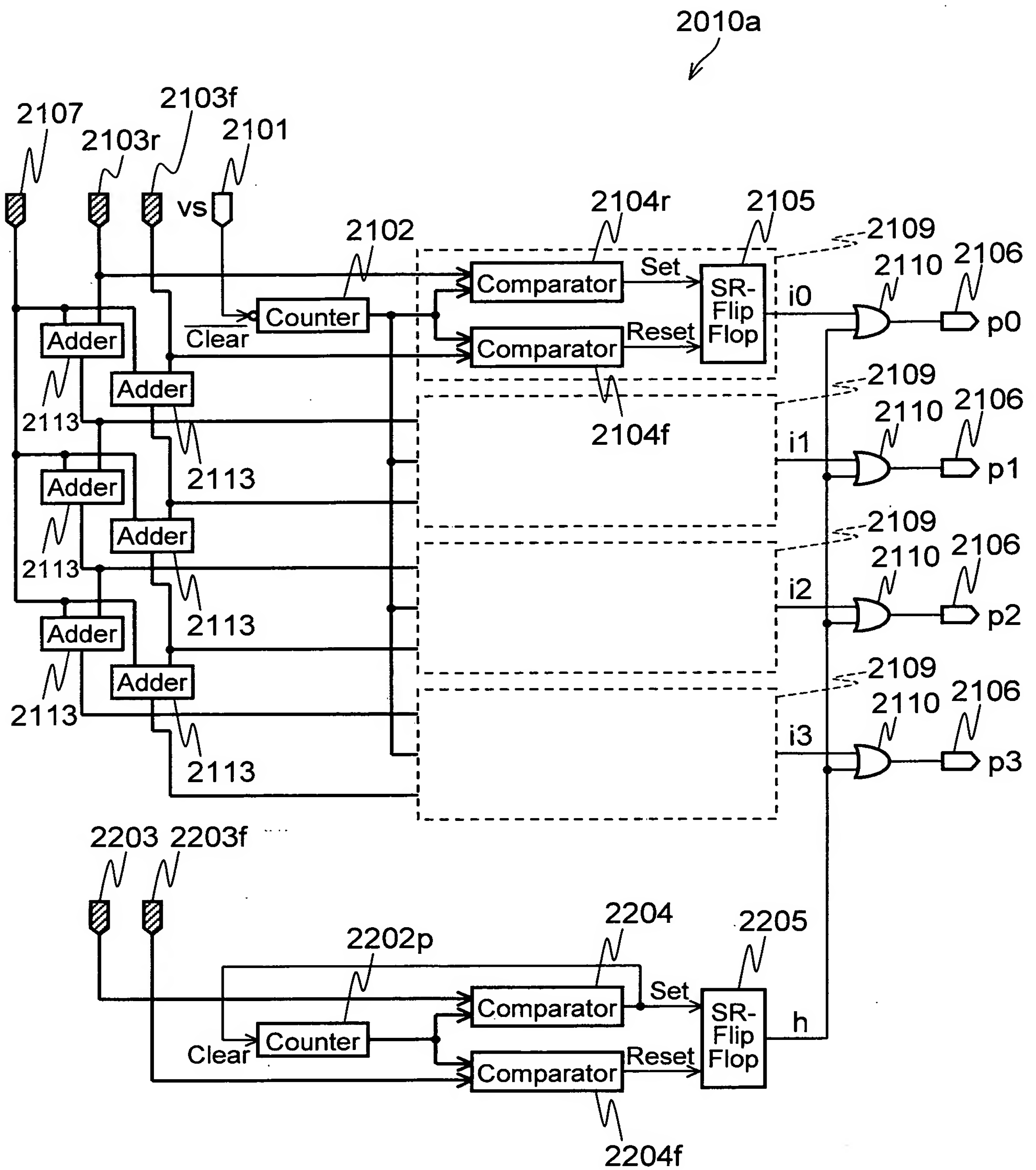


FIG. 114

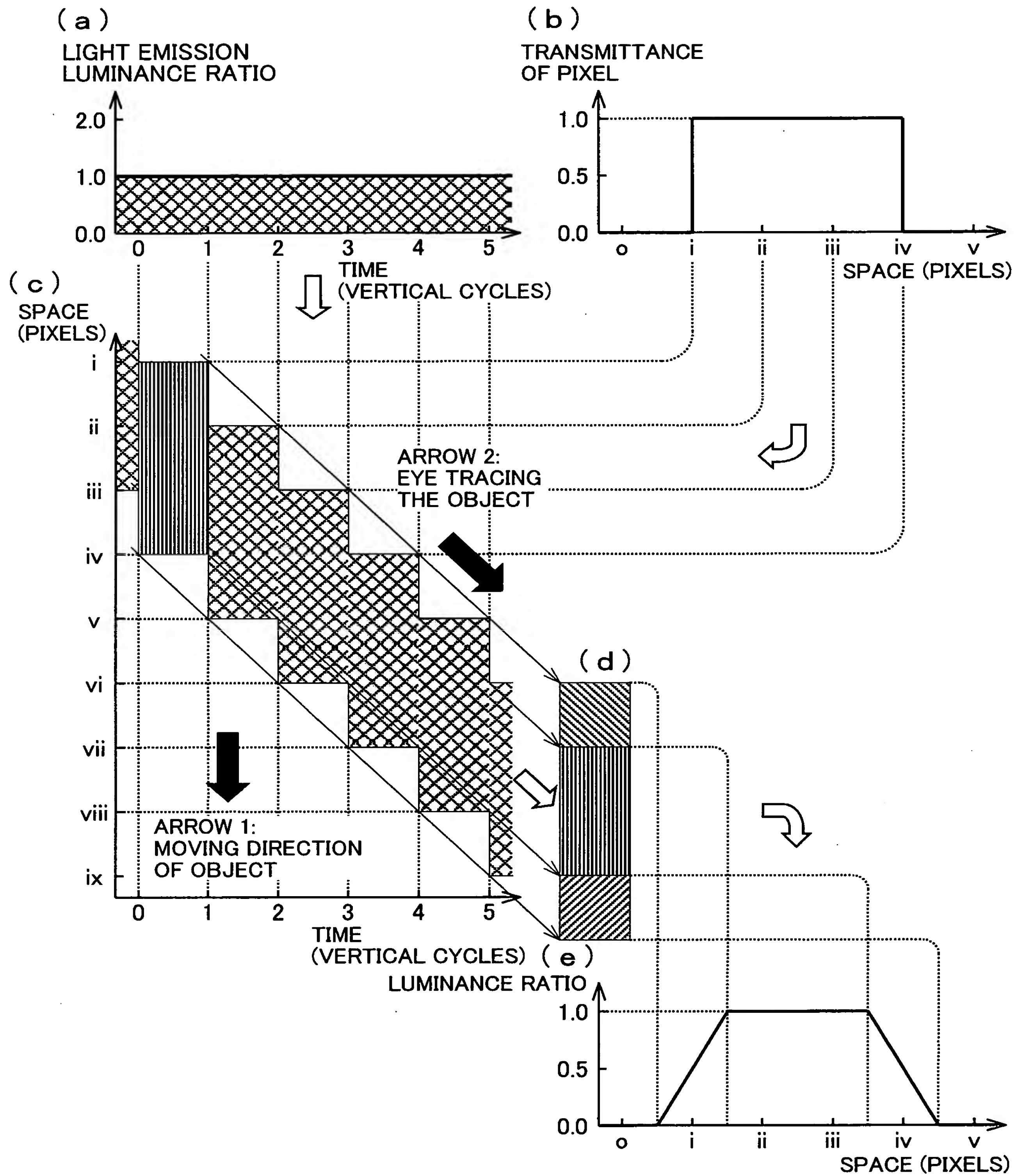


FIG. 115

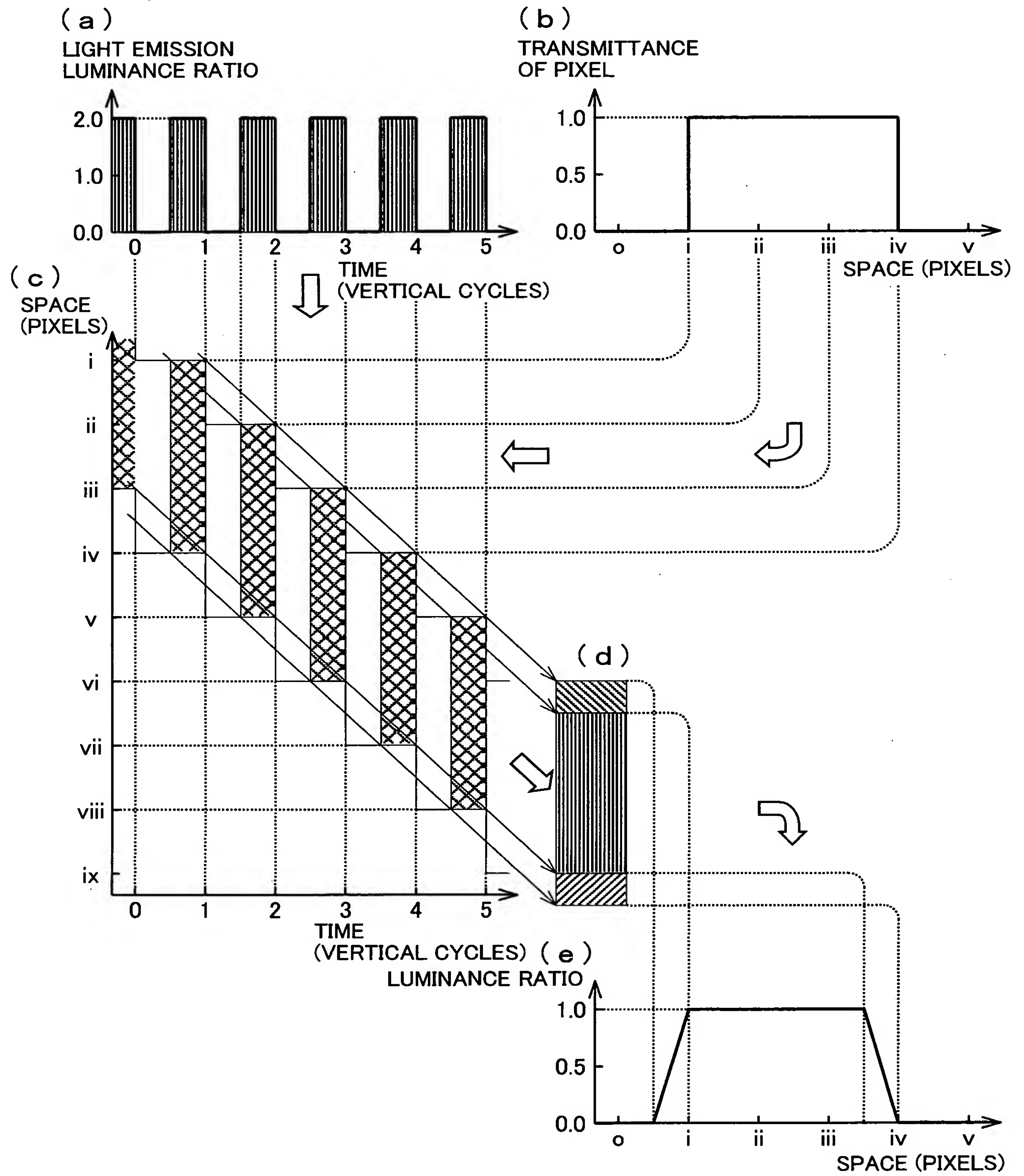


FIG. 116 (a)

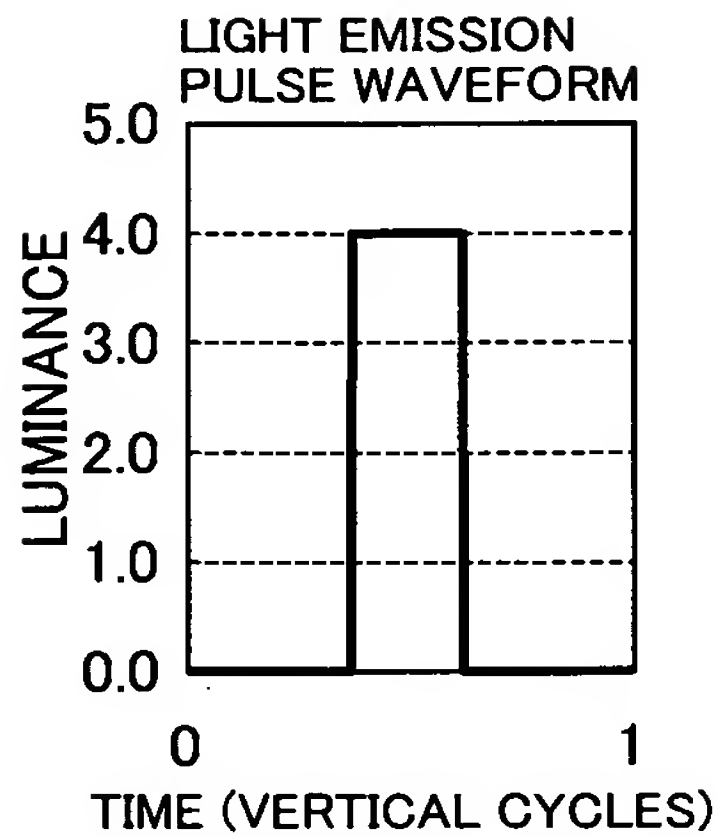


FIG. 116 (b)

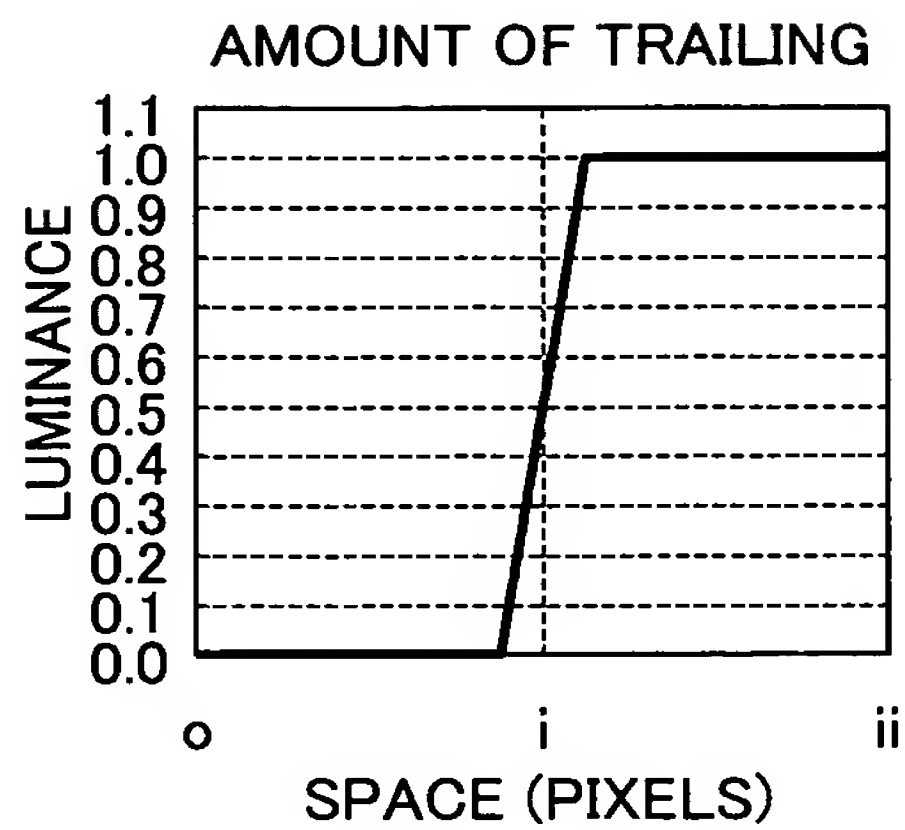


FIG. 116 (c)

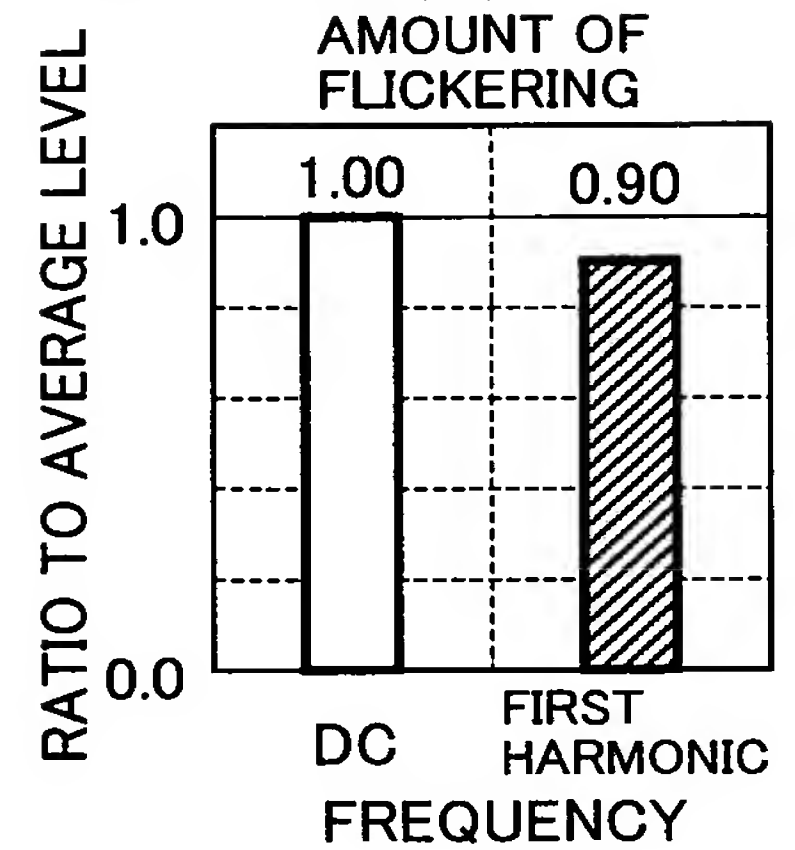


FIG. 116 (d)

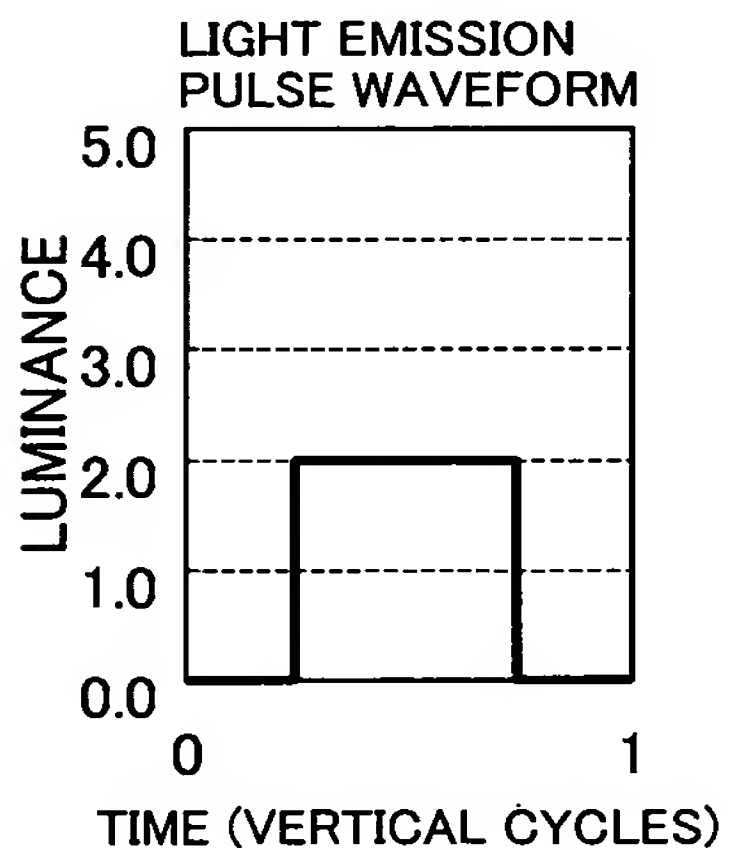


FIG. 116 (e)

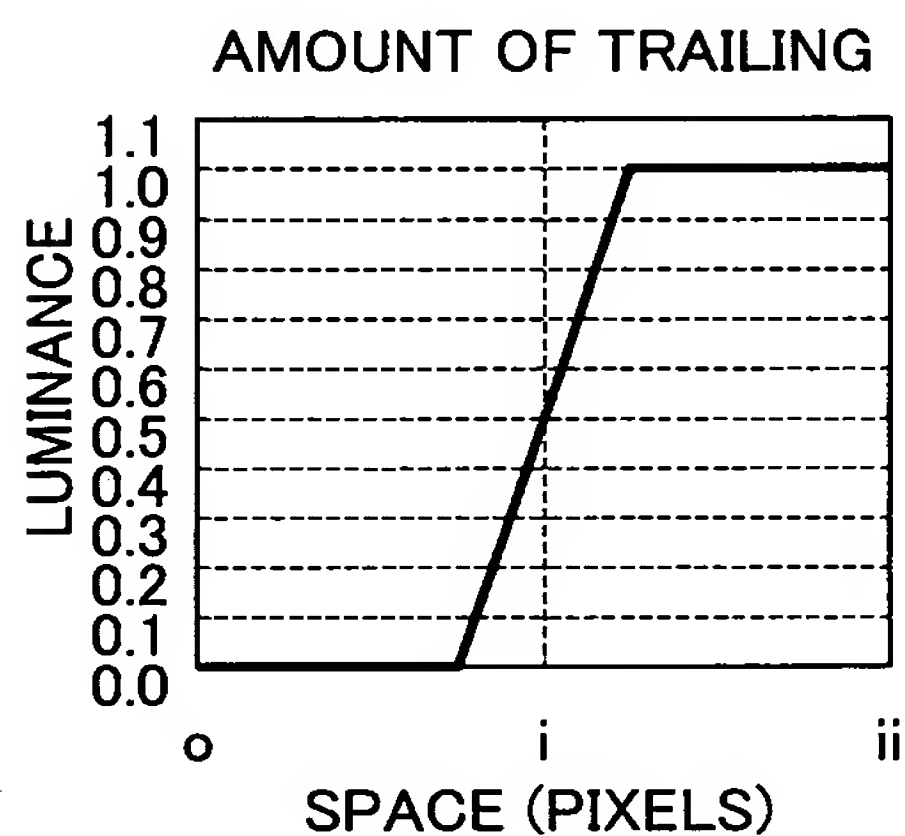


FIG. 116 (f)

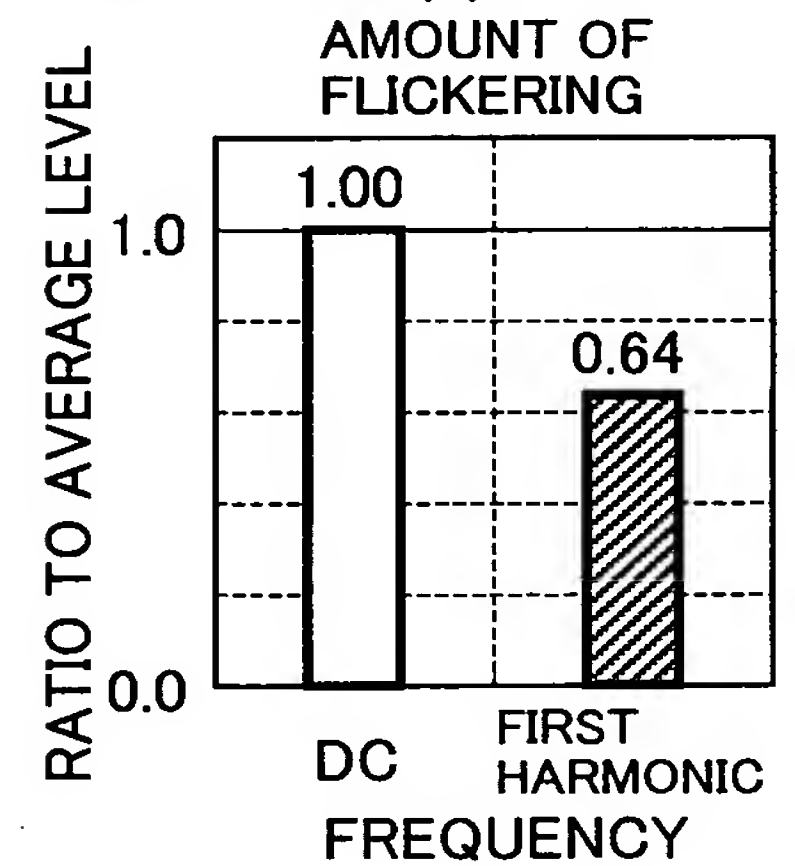


FIG. 116 (g)

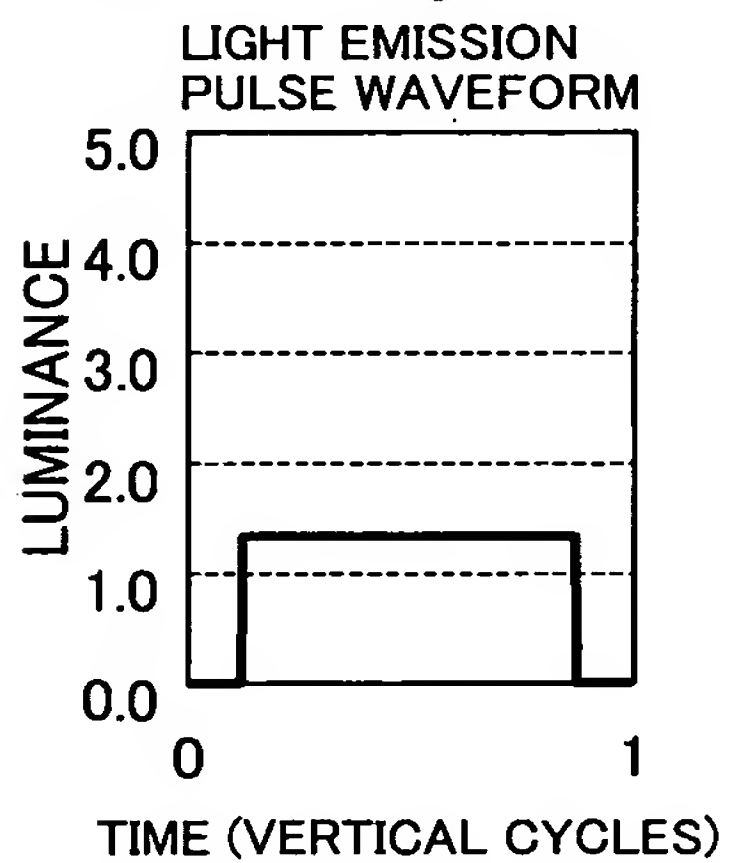


FIG. 116 (h)

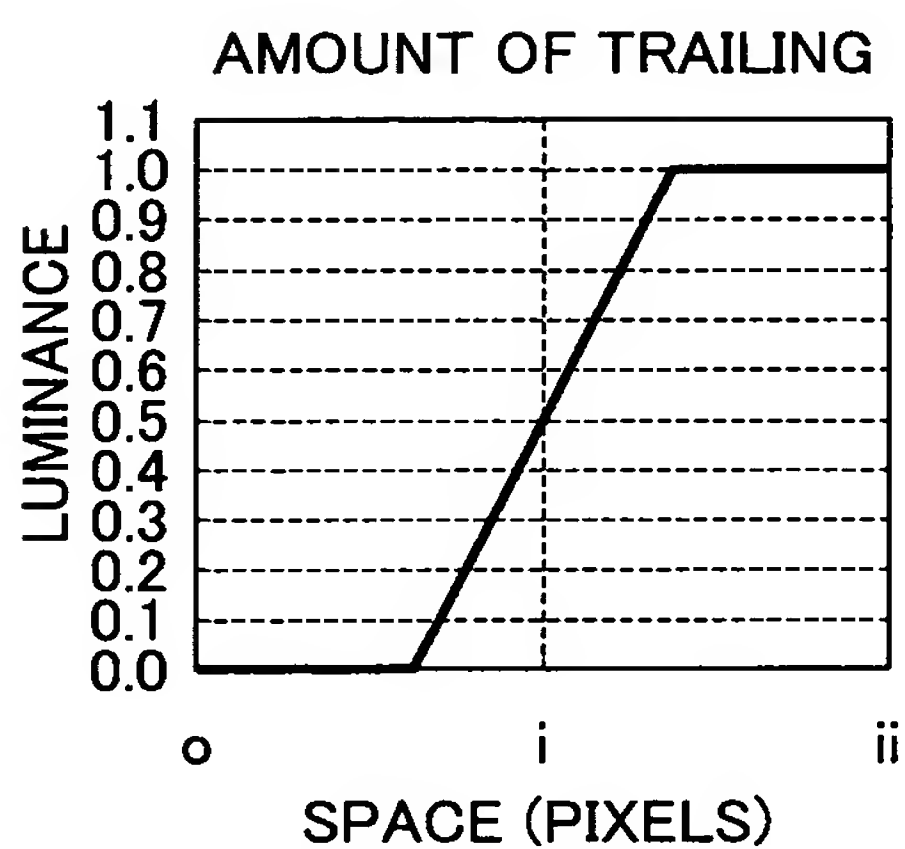


FIG. 116 (i)

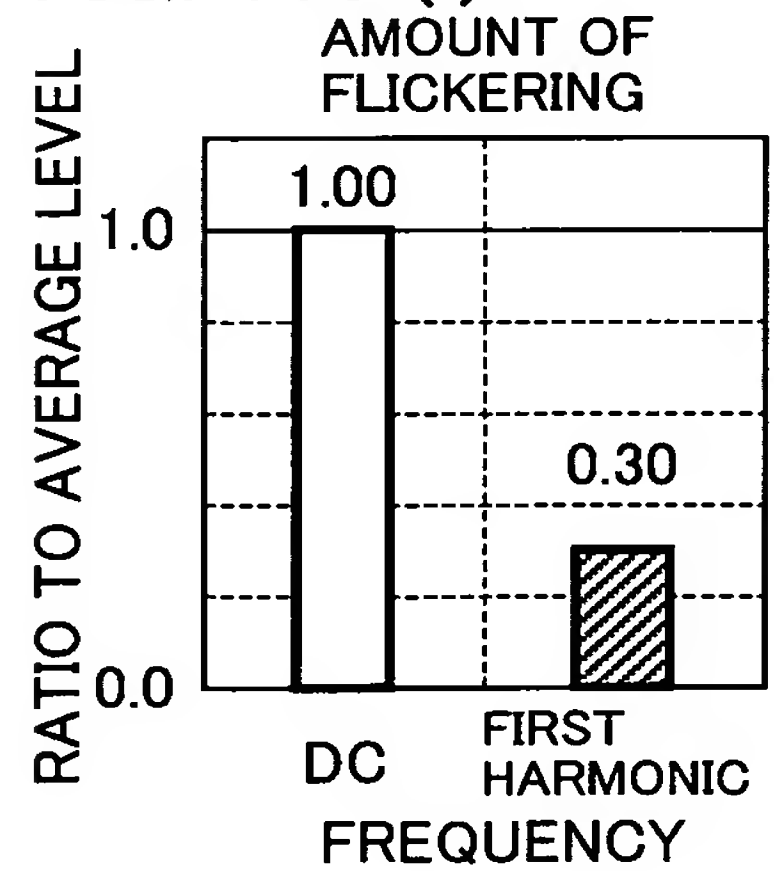


FIG. 117 (a)

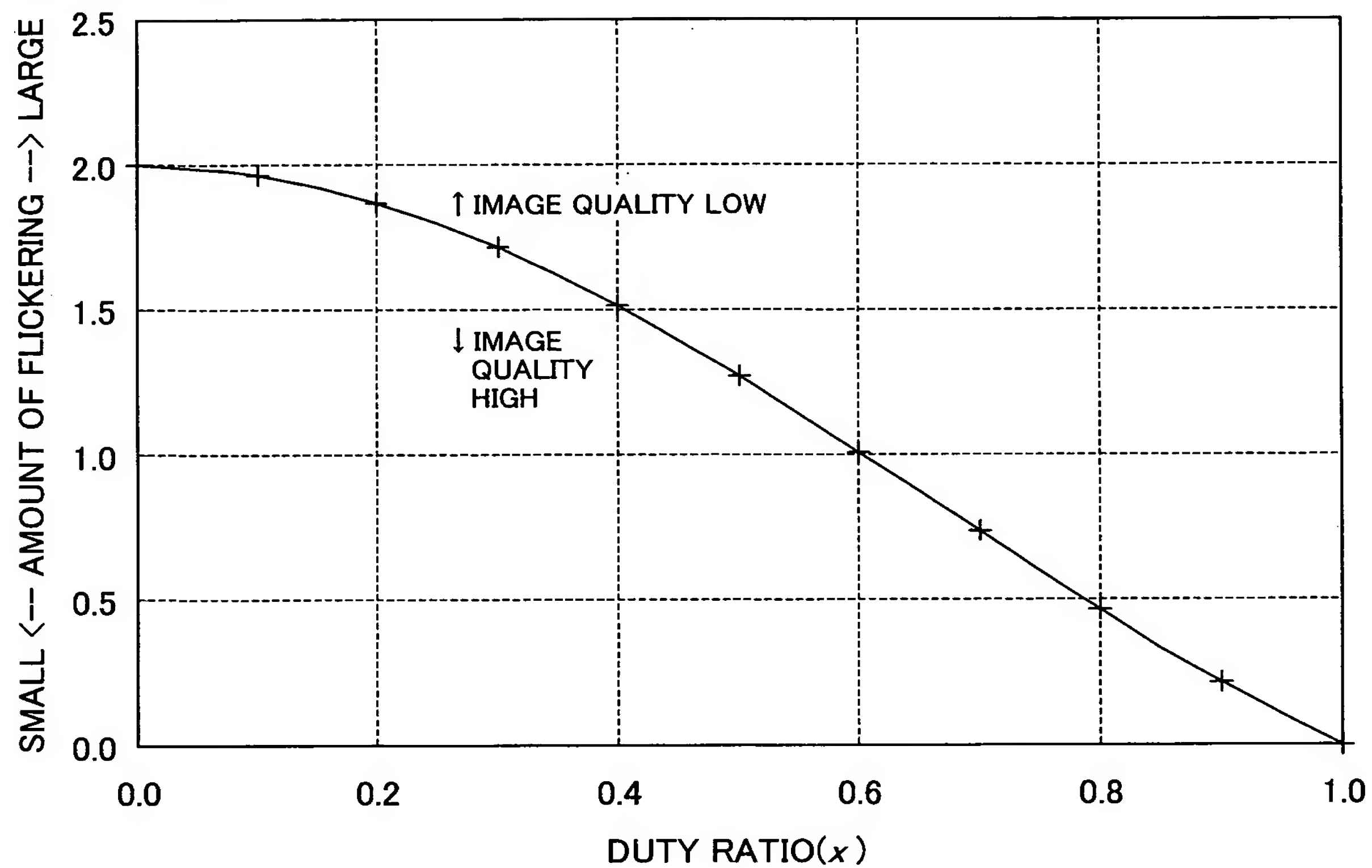


FIG. 117 (b)

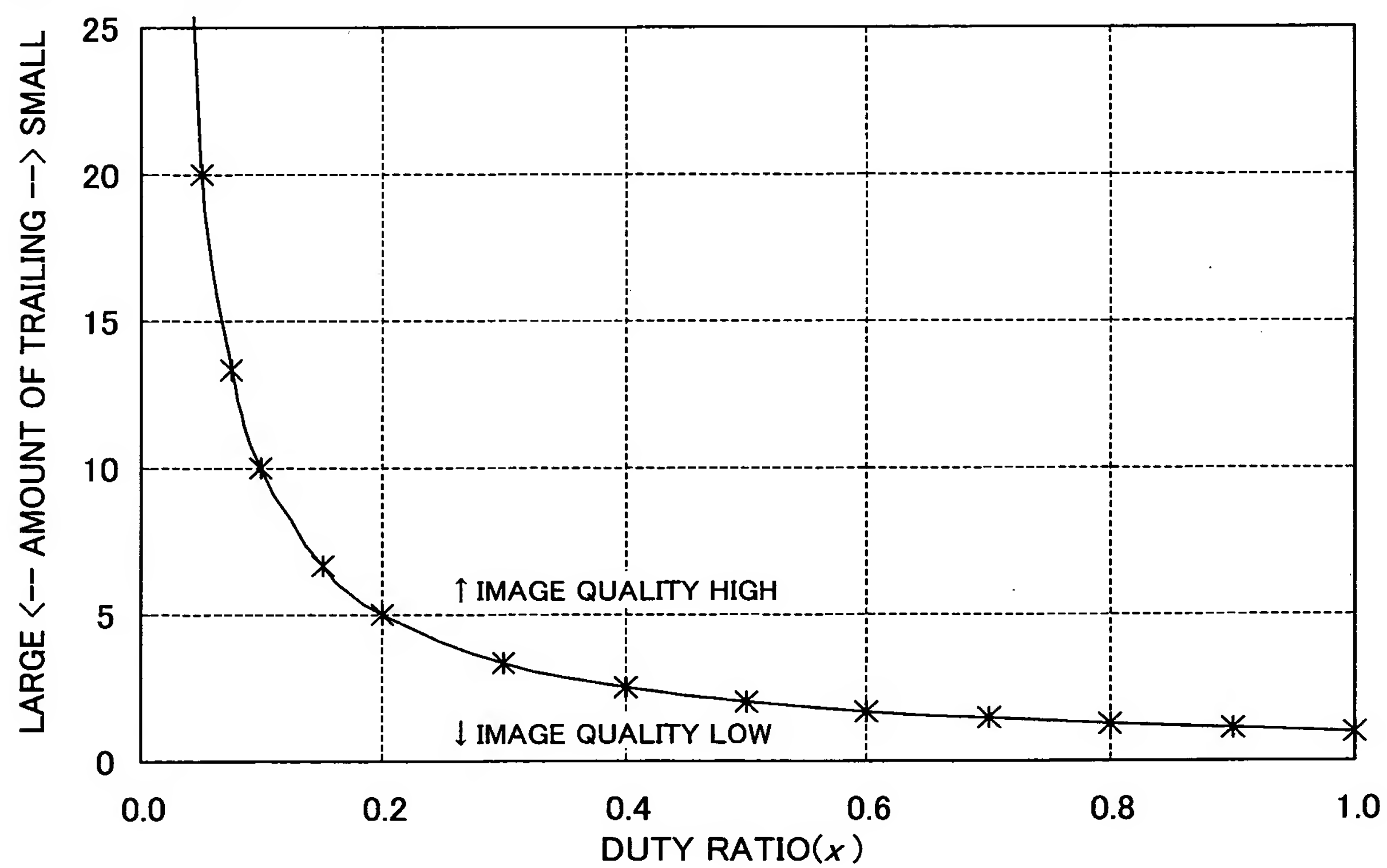


FIG. 118

RELATIONSHIP BETWEEN AMOUNTS OF TRAILING AND FLICKERING

